DOCUMENT RESUME

ED 461 321 HE 030 857

AUTHOR	Scheetz, L. Patrick
TITLE	Recruiting Trends, 1997-98: A National Study of Job Market Trends for New College Graduates among 477 Businesses, Industries, and Governmental Agencies. 27th Edition.
INSTITUTION	Michigan State Univ., East Lansing. Collegiate Employment Research Inst.
PUB DATE	1998-12-05
NOTE	44p.; For the 1996 26th edition, see ED 402 807.
AVAILABLE FROM	Michigan State University, Career Services and Placement, 113 Student Services Bldg., East Lansing, MI 48824-1113 ($25). Tel: 517-355-9510; Fax: 517-353-2597.
PUB TYPE	Reports - Research (143)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	*College Graduates; Databases; Demand Occupations; *Education Work Relationship; *Employment Opportunities; Employment Patterns; Employment Qualifications; Higher Education; *Job Applicants; Job Skills; *Labor Market; National Surveys; Occupational Information; *Occupational Surveys; Trend Analysis

ABSTRACT

This report of job recruiting trends affecting 1997-98 college graduates is based on survey results from 477 businesses, industries, and governmental agencies. It notes that employers anticipate an increase of 27.5 percent in job prospects for new college graduates and that there is a high demand for technical graduates, including majors in computer and information sciences, engineering, business management and administrative services, and the health professions. Factors affecting the job market include steady growth of the economy, and low inflation and low unemployment rates. Also included are discussions of: estimated starting salary averages and ranges for new college graduates, employment opportunities by U.S. geographic region, demand for new hires with real-world work experiences, factors affecting job opportunities for new graduates, job outlook by industry, high demand skills, campus recruitment activities expected by employers, importance of overseas educational experiences, overseas employment opportunities available for new graduates, foreign language competencies required by employers, trends in hiring liberal arts graduates, the key factors considered when interviewing, effectiveness of Internet and Web sites for recruiting, and work environment changes expected by employers during the next 5 years. Other report sections cover survey procedures and types of and geographic locations of employer respondents. (SW)

Reproductions supplied by EDRS are the best that can be made
from the original document.

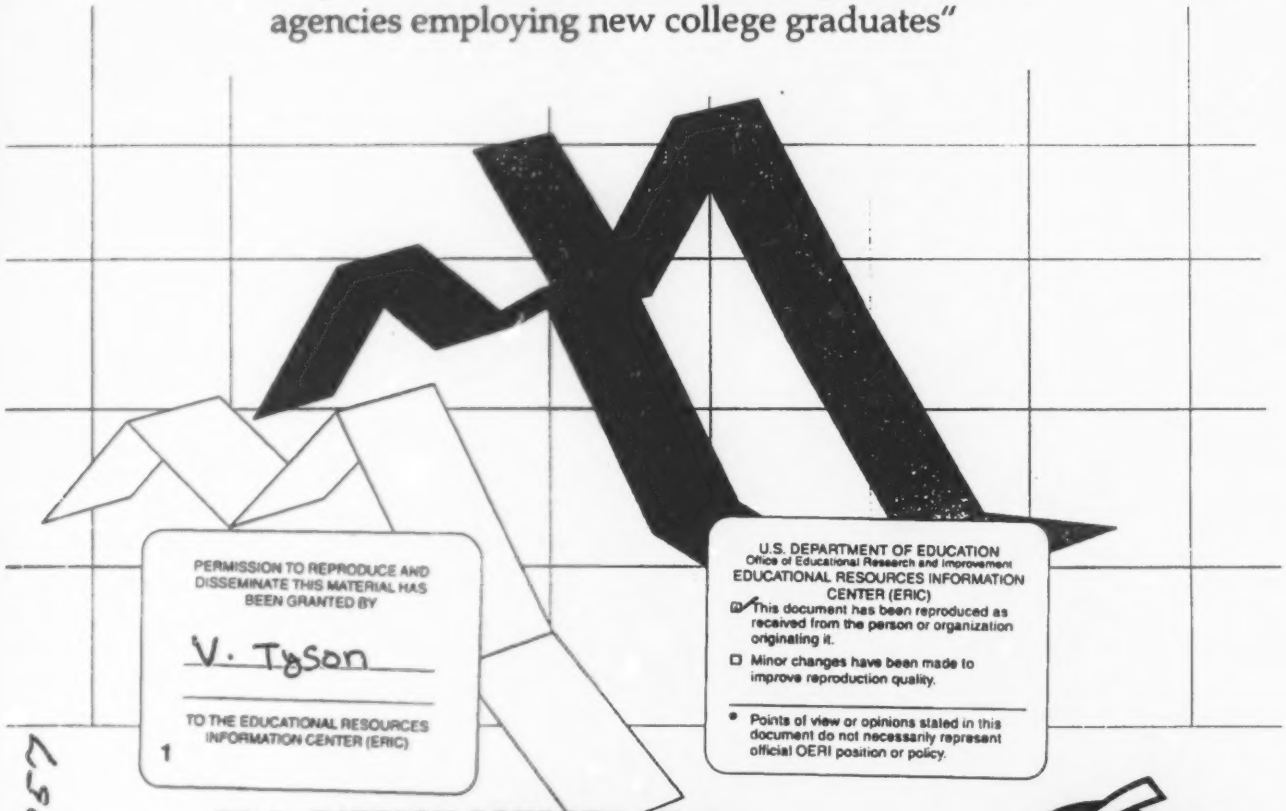
Twenty-seventh edition

ED 461 321

Recruiting Trends 1997-98

The collegiate employment research institute at Michigan State University

"A study of businesses, industries, and governmental agencies employing new college graduates"



PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

V. Tyson

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

BY L. PATRICK SCHEETZ, Ph.D.
Director
Collegiate Employment Research Institute
and Assistant Director
Career Services and Placement

IAE 030 857

CAREER SERVICES & PLACEMENT

113 Student Services Building
East Lansing, MI 48824-1113

BEST COPY AVAILABLE

BOARD OF TRUSTEES

THE HONORABLE DOLORES M. COOK, Chairperson
504 W. Judd
Greenville, MI 48838
(616) 754-8227

THE HONORABLE JOHN D. SHINGLETON, Vice Chairperson
798 Pebblebrook Lane
East Lansing, MI 48823
(517) 332-4589

THE HONORABLE DOROTHY GONZALES
P.O. Box 242
East Lansing , MI 48823-0242
(517) 332-2721

THE HONORABLE BOB TRAXLER
4800 Appletree Lane
Bay City, MI 48076
(517) 684-2381

THE HONORABLE COLLEEN M. McNAMARA
Michigan Cable Telecommunications Association
615 W. Ionia
Lansing , MI 48933
(517) 482-2622

THE HONORABLE DONALD W. NUGENT
1225 Forrester Road
Frankfort, MI 49635
(616) 352-7181

THE HONORABLE JOEL FERGUSON
5815 South Pennsylvania
Lansing, MI 48911
(517) 394-1922

THE HONORABLE ROBERT E. WEISS
11344 Brookshire
Grand Blanc, MI 48439
(810) 694-8986 res.
(811) (810) 694-1720 office

PETER McPHERSON, President, Ex Officio, Presiding Officer
President's Office
450 Administration Bldg.
Michigan State University
East Lansing, MI 48824-1046

NANCY H. POGEL, Secretary of the Board of Trustees
Secretary's Office
450 Administration Bldg.
Michigan State University
East Lansing, MI 48824-1046

27th Edition

RECRUITING TRENDS 1997-98

A National Study of Job Market Trends
for New College Graduates
Among 477 Businesses, Industries, and Governmental Agencies

By

L. Patrick Scheetz, Ph.D.
Director
Collegiate Employment Research Institute
and
Assistant Director
Career Services and Placement

MICHIGAN STATE UNIVERSITY

Vernicka K. Tyson, Director
Career Services and Placement
113 Student Services Building
East Lansing, Michigan 48824-1113

Telephone: (517) 355-9510, ext. 361
Fax: (517) 353-2597
Email: Pla00@MSU.edu
HomePage: http://www.msu.edu/csp/

ACKNOWLEDGMENTS

Employers who responded to this survey were especially valuable. Without their extra efforts, this research effort would be impossible. Many graciously responded during the peak of their recruitment season. Thank you for the sincere and truthful assessment of the current job market trends for new college graduates.

Several staff of Career Services and Placement at Michigan State University were likewise helpful with completion of this project. **Vernicka Tyson**, Director of Career Services and Placement, and **Dr. Phil Gardner**, Research Administrator of the Collegiate Employment Research Institute, were supportive and offered extra assistance. **Lynne Zelenski** good-naturedly edited the final edition. **Wen-Ying Liu**, Graduate Research Assistant for the Collegiate Employment Research Institute, provided statistical analyses. **Chuck Eiler** rendered desktop publishing expertise, and **Bernadette Brewer, Brenda Robinson, Nicole Runyon, Cassie Runyon, Candace Moore, Marquita Hyde, Rukeia Draw,** and **Lori Holuta** worked diligently on mailing of surveys, calling employers, tracking responses, data entry, and typing of employer comments.

Any who helped with the research, but were inadvertently overlooked, please accept my apologies. This project would not be accomplished without help from many busy hands. Special thanks are extended to all who assisted.

L. Patrick Scheetz, Ph. D.
Price: $25

Copyright: December 5, 1998
Michigan State University

Career Services and Placement
A Division of Student Affairs and Services

MSU is an Affirmative Action/Equal Opportunity Institution

Executive Summary

Recruiting Trends 1997-98

- The Class of 1997-98 will begin life after graduation and encounter many uncertainties in a new economic age, face the realities of living on their own, and possess only hints of a work world they are entering. The greatest concerns for these new graduates are the "surprises" that await them beyond the gates of their alma mater.

- Continuing growth in job opportunities experienced during the late 1990's is predicted to last for another year. Employers responding to this survey anticipate an increase of 27.5% in job openings for this year's college graduates. The increase predicted is considerably greater than any recorded in recent job market history for new college graduates. This is the fifth consecutive year of expanding job opportunities for college graduates.

- Demand for technical graduates remains very high, especially new graduates, regardless of college major, with computer skills. Demand is currently outpacing the supply of technical graduates. . Requested most frequently are majors in computer and information sciences, engineering, business management and administrative services, and the health professions and related services.

- The overall job market for new graduates was characterized as "excellent" by 35.4% of the respondents, "very good" by 37.6%, and "good" by 23.8%. According to employers, "It's a seller's market this year."

- The Year 2000 conversion of computer systems is gaining increased attention. Employers are searching for information systems staff who can help them rewrite code for complext computer programs. The focus is on Cobol, C and C++ source code. There are terrible predictions of complete shutdown of businesses and governmental agencies on January 1, 2000.

- Fewer new bachelor's degree graduates are expected to graduate this year and for the next three years. Employers are indicating an inadequate supply of new graduates applying for their job openings. This may be some of the reason.

- Starting salary increases are expected to average approximately 3% to 5%. Highest among anticipated increases this year are salaries for engineers (4.1%), MBA graduates (5.0%), and Ph.D. graduates (4.6%). Increases for business graduates are expected to average approximately 3.5% and social sciences, liberal arts, and communication arts majors about 3.2%.

- The highest starting salaries are expected this year for majors in chemical engineering ($44,557), electrical engineering ($41,167), mechanical engineering ($39,857), industrial engineering ($39,462), and computer science ($38,741).

- Overseas educational experiences provide college students with excellent opportunities to acquire job competencies and skills needed by employers. Among the abilities, talents, and aptitudes obtained by college students while studying abroad were a sensitivity to people of other cultures, a foreign language competency, knowledge of business practices in other countries, and improved self-confidence.

- Career-related preprofessional experiences such as cooperative education, internships, practicum positions, and volunteer assignments help bridge the gap between academic preparation and a career "in the real world." Any professional-level positions were recommended by surveyed employers as excellent preparation for professional job responsibilities.

- Employment opportunities at higher levels were expected in all geographical regions of the United States this year. The most favorable job prospects for new graduates were anticipated in the southwestern region of the country, but "high" to "extremely high" availability was reported for the northcentral, southeastern, northeastern, and southcentral regions.

This overview was prepared by the Collegiate Employment Research Institute on December 2, 1998. Copies of *Recruiting Trends 1997-98* may be purchased for $25 each; or five (5) or more copies at $12.50 each. If you wish to obtain a copy, please prepare a check or money order payable to **Michigan State University** and send to: L. Patrick Scheetz, Ph.D., Director, Collegiate Employment Research Institute, Michigan State University, 113 Student Services Building, East Lansing, MI 48824-1113, or call: (517) 355-9510, ext. 361; fax: (517) 353-2597; or email: Scheetz@pilot.msu.edu .

Table of Contents

Introduction 1
Survey Procedures 2
Employers Responding 3
Geographical Locations of Employers Responding 3
Total Salaried Employment In Organizations Responding 3
Categories of Employers Responding 4
Overall Job Market For The Class Of 1997 5
Predicted Overall Job Market 8
Job Outlook By Industry 8
Factors Affecting Job Opportunities This Year 9
Percentage Change Expected In Starting Salary Offers 12
Estimated Starting Salary Averages 13
Employment Opportunities For Each Geographical Region Of The United States 15
New Hires With Career-Related Preprofessional Experiences 15
New Contract and Temporary Employees Hired 16
Competencies and Skills InHighest Demand 16
Campus Visits For Recruitment 17
Employees Working in Overseas Locations 17
Importance of Overseas Educational Experiences 17
Competencies and Skills Acquired While Studying Abroad 18
Foreign Language Competencies Required by Employers 19
Hiring of Liberal Arts Graduates 19
Positions Available For Liberal Arts Graduates 20
Internships and Practicums For Liberal Arts Graduates 20
Skills And Competencies Possessed By Liberal Arts Graduates 20
Key Factors Considered When Interviewing 21
Changes Expected During The Next Five Years 23
Effectiveness Of Internet And Web Sites For Recruiting 24
Changes In Recruitment Caused By the Internet 24
Advantages and Disadvantages Of Internet And Web Sites For Recruiting 25
Footnotes 28
Employers Responding to 29

RECRUITING TRENDS 1997-98

27th Edition

A National Study of Job Market Trends
for New College Graduates

Among 477 Businesses, Industries, and Governmental Agencies

Introduction

As each graduating class enters the spring semester of their commencement year, the uncertainty of tomorrow becomes more vivid. The graduates begin asking themselves: Will I find a job that brings me joy and happiness? Will any employers offer me a job? Will my starting salary be sufficient to let me live comfortably and also pay back the loans I have accumulated while attending college? Will my future be bright and shiny, or will I face dark clouds and gloomy times?

As the Class of 1997-98 begins life after graduation, they too will encounter the uncertainties of a new economic age, intense environmental concerns, the potential of dislocation from a geographical area they have come to know well, the reality of living on their own, and only a few hints about the work world they are entering. The greatest concerns for these new graduates will be the "surprises" that await them beyond the gates of their alma maters.

Although it is really impossible to precisely predict the future, this research on the hiring of new college graduates by businesses, industries, and governmental

agencies will tell us the issues, concerns, and perspectives of employers who know as much as anyone about the current job market trends. The goal of this publication is to minimize speculation about this year's job market for new college graduates by providing the most reliable and extensive information possible.

Survey Procedures

The 27th annual ***Recruiting Trends*** survey was mailed to 4,981 employers representing businesses, industries, and governmental agencies throughout the United States. A six-page (6) questionnaire was initially sent by first-class mail to these employers between September 23 and October 6, 1997.

Of the six-page (6) questionnaires that were mailed, 191 were returned. Of these, 161 were complete enough for statistical purposes.

In the survey population for this year's study were employers representing the National Association of Colleges and Employers (NACE), regional career services and employer associations (Midwest ACE, ECEN, MAACE, RMACE, SCPA, SWACE, and WACE), employers registered with Career Services and Placement at Michigan State University, and employers selected randomly from organizations listed in the *Standard and Poor's Register*.

The employer mailing list is continually updated throughout the year. Employers frequently contact MSU's Career Services and Placement office and request participation. New contacts are acquired from numerous other resources (i.e. human resources mailing lists, job vacancy listings, professional journals, etc.).

A one-page follow-up questionnaire was mailed to employers who had not responded by November 1, 1997. Replies to these surveys were requested by November 14, 1997.

Telephone calls were placed to major employers selected from the mailing list, who had not responded. Businesses, industries, and governmental agencies with 2,500 employees were included and administered the short questionaire. Telephone numbers were obtained from the National Association of Colleges and Employer's *Directory of Who's Who In Career Services and HR/Staffing*. These calls were made between October 15 and November 14, 1997.

Responses to the following four questions were solicited on the short form: How many new college graduates were hired by your organization from all colleges and universities throughout the country into salaried positions last year (1997-98)? How many new college graduates does your organization expect to hire for salaried positions this year (1997-98)? How many total salaried employees (excluding clerical and laborer staff) are currently on the payroll of your organization? What type of business and industry they represented? There were 338 employer responses received using the short one-page questionnaires.

The task of obtaining responses to the *Recruiting Trends* survey from employers was once again an arduous task. Sufficient responses were essential to obtain a representative sample of employers hiring new college graduates throughout the United States.

Responses received to this year's survey were the accumulation of replies acquired from all these endeavors. Once again, several employer representatives refused to respond. Other organizations lacked the data to even respond to the basic question.

Copies of the final *Recruiting Trends 1997-98* report will be offered to employers who responded to the survey. This offer was extended as a reward for the extra efforts required when collecting and analyzing each organization's offers of employment and projected personnel needs. Employers were reminded about the significance of the survey results to college students who are attempting to prepare them selves for transition to

life after college. To accomplish the objectives of this research project, it is absolutely essential that cooperation be obtained from many employers throughout the nation. In addition, sincere and truthful answers are necessary for an accurate assessment of the job market for new graduates.

Employers Responding

Recruiting Trends questionnaires were returned this year by 530 organizations (10.6%), and, of these replies, 477 were complete enough for statistical purposes (9.6%). Some employers responding to the survey were unable to provide any data on the number of new college graduates hired by their organizations. Other employers were only able to provide partial data, so their responses could not be used. However, from the responses received, an adequate representation was obtained from organizations recruiting new college graduates on college and university campuses throughout the United States to reflect the potential hiring patterns for 1997-98.

Businesses, industries, manufacturing organizations, and service sector employers represented 87.9% of the respondents. Three hundred ninty-five responses were received from business, industry, manufacturing, and service sector employers. Responses were received from 64 government-related agencies at the local, state, and federal government levels and the military services (12.1%). An additional 72 responses were received from organizations which could not be classified.

Geographical Locations of Employers Responding

Respondents to this year's *Recruiting Trends* survey represented all geographical regions of the United States. The percent of responses received from each geographical region is indicated below:

·Northeast (Maine, Massachusetts, Connecticut, Delaware, Pennsylvania, New York, Maryland, etc.) - 26.2%

·Southeast (Florida, Georgia, Virginia, North Carolina, South Carolina, Tennessee, etc.) - 9.9%

·Northcentral (Michigan, Indiana, Minnesota, Wisconsin, Illinois, Ohio, Iowa, Nebraska, etc.) - 41.0%

·Southcentral (Texas, Oklahoma, Arkansas, Kansas, Missouri, Louisiana, etc.) - 11.0%

·Northwest (Alaska, Washington, Oregon, Idaho, Montana, Wyoming, etc.) - 2.1%

·Southwest (California, Nevada, Hawaii, New Mexico, Arizona, Colorado, etc.) - 9.7%

Total Salaried Employment In Organizations Responding

All sizes of businesses, industries, and governmental agencies were represented among the employers responding to this year's survey. Responses ranged from employers with 1 to 99 salaried employees in their organizations (excluding clerical and laborer staff) to employers with more than 10,000 salaried employees on their payrolls.

Organizations with 1,000 to 4,999 employees represented 26.2% of the respondents; those with 10,000 or more employees were 18.7% of the respondents; and employers with 100 to 499 employees were represented 17.4% of the respondents. Organizations employing 1 to 99 personnel represented 14.8% of the respondents; those with 500 to

999 employees were represented by 12.9% of the respondents; and organizations employing 5,000 to 9,999 personnel represented 10.1% of the employers replying to this year's survey.

Organizations responding to this year's ***Recruiting Trends*** survey employed approximately 6,230,009 total salaried personnel (excluding clerical and laborer staff) last year (1996-97). The total salaried employees in surveyed organizations represented approximately 8.2% of salaried employees on the payrolls of all businesses, industries, and governmental agencies throughout the United States.

Employers responding to the ***Recruiting Trends*** report last year employed approximately 5,289,445 total salaried employees, which represented approximately 7.1% of all salaried employees on the payrolls of businesses, industries, and governmental agencies throughout the United States in 1995-96.

Salaried employees working for businesses, industries, and governmental agencies throughout the United States in October 1997 totaled approximately 76,394,000, according to the U.S. Department of Labor.[5] This was a2.2% increase from 74,729,000 salaried employees on the payrolls of these organizations in October 1996.

Categories of Employers Responding

Many sectors of business, industry, and government were represented in the replies received to this year's survey. An appendix to this report contains an alphabetical list of organizations who responded this year. The number and percentage of total responses received from each business, industry, and government sector are indicated below:

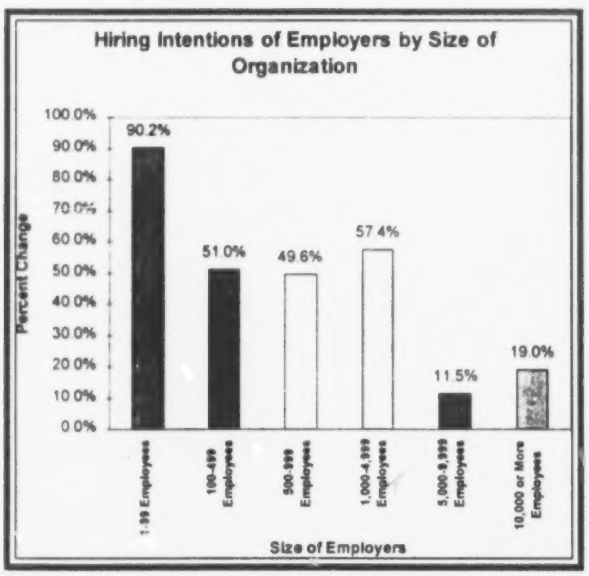
- Accounting, 2.6% (n=12)
- Aerospace and Components, 2.2% (n=10)
- Agribusiness, 0.7% (n=3)
- Automotive and Mechanical Equipment, 4.6% (n=21)
- Banking, Finance, and Insurance, 10.0% (n=46)
- Chemicals, Drugs, and Allied Products, 4.6% (n=21)
- Communications and Telecommunications (including telephones, newspapers, magazines, radio and television), 4.8% (n=22)
- Construction and Building Contractors, 1.5% (n=7)
- Diversified Conglomerates, 0.7% (n=3)
- Electronics, Computers, and Electrical Equipment Manufacturers, 12.0% (n=55)
- Engineering, Research, Consulting, and Other Professional Services, 11.8% (n=54)
- Food and Beverage Processing, 4.4% (n=20)
- Glass, Packaging, and Allied Products, 0.7% (n=3)
- Government Administration including the Military, 7.6% (n=35)
- Hospitals and Health Care Services, 1.5% (n=7)
- Hotels, Motels, Restaurants, and Recreational Facilities, 0.2% (n=1)
- Lumber, Wood Products, and Furniture Manufacturers, 0.9% (n=4)
- Merchandising and Retailing, 7.6% (n=35)
- Metals and Metal Products, 4.4% (n=20)
- Petroleum and Allied Products, 3.3% (n=15)
- Public Utilities (including Transportation), 4.8% (n=22)
- Social Services, Religious, and Volunteer Organizations, 7.0% (n=32)
- Textiles, Home Furnishings, and Apparel Manufacturers, 1.7% (n=8)
- Tire, Rubber, and Allied Products, 0.7% (n=3)

Overall Job Market For The Class Of 1997-98

To obtain the change in hiring of new college graduates for this year, the respondents provided data on new hires obtained last year and the total of anticipated new hires for this year. Each sum was divided by the number of respondents. The two averages were then used to calculate the percentage change in hiring between the two years. While this approach may potentially bias the final figure toward those employers who report the largest numbers, it does control for large fluctuations found in individual percentage changes, due to size of firm.

The total number of survey responses received was 530. Yet, 53 employer responses failed to provide sufficient data on the key variables so they could not be used in the statistical analyses. The number of responses used for statistical analysis purposes was 477.

Another increase in hiring of new college graduates is expected by surveyed employers this year. Approximately 27.5% more new college graduates will be required to fill the positions available in the surveyed organizations. Job growth for new college graduates has now been positive for five (5) consecutive years.



The increase predicted for this year by employers responding to the *Recruiting Trends* survey is considerably greater than any recorded in recent job market history. This report should receive a cheerful reception.

When comparing this year's job market for new college graduates with the previous all-time high in 1988-89, keep in mind that there were 1,018,755 new bachelor's degree graduates that year. This compares to 1,169,000 new bachelor's graduates anticipated this year, so more than 150,000 additional jobs or graduate school admissions are needed for equal placement this year.

An expanding job market for new college graduates affords greater opportunities for acquiring entry-level assignments which utilize college degrees. Therefore, more new college graduates should not be surprised with the job offers they receive from employers this year. In the past, job offers were not bad, but they should be better this year.

Beneath the surface of this figure are several dynamics at work. For instance, there were 46 employers who hired no new college graduates last year. This year, these employers expect to hire 293 new graduates, an average of 6.4 new hires per employer.

The percentage change in hiring for this group could not be calculated, since the number of new college graduates hired last year (zero) minus the number of anticipated hires for this year divided by the number of new graduates hired last year (zero) would yield zero.

Of the respondents 359 employers were expecting increases or decreases in the range from +100% to -100%. The calculated percentage change in hiring for this group was 15.6%.

Another 72 employers expected to increase their hiring of new college graduates by more than 100%. These employers were anticipating an average change in employment prospects of +726.1%.

Of these 72 employers, 73.6% identified both the size of their organizations and the employer categories for their organizations (n=53).

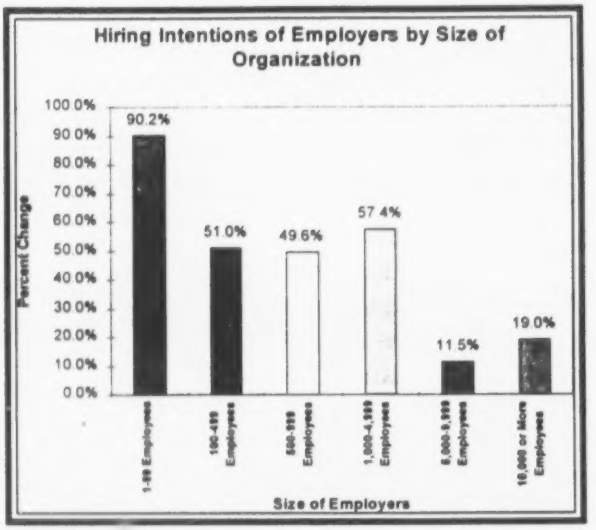
Of these 53 organizations, 16 were electronics, communications and telecommunications-related industries (30.2%), 10 were in basic manufacturing-related companies (18.9%), and 10 were in engineering and machinery-related functions (18.9%). Size of these organizations varied as well. Of the 53 respondents, 17 had 1,000 to 4,999 employees (32.1%) and 11 had 10,000 or more employees (20.8%).

The aggregated total of change in job market for new college graduates was approximately 27.5% when all three groups were included. Clearly, more new college graduates will be required to fill positions available with surveyed employers this year.

Groups	Descriptions of Groups	No. of Employers Responding	Anticipated Change	Total Hired Last Year	Anticipated Hires This Year
Group I	No Hires Last Year	46	0	0	293
Group II	Increase Greater Than 100%	72	726.1%	2,503	11,129
Group III	Increase/Decrease +100% to -100%	359	15.6%	45,267	49,478
Overall Total	All Valid Respondents	477	27.5%	47,770	60,900

Size of employer indicated variable changes in hiring patterns too. Organizations with 1 to 99 employees (n=64) expected increases of approximately 90.2% in hiring of new college graduates. Increases in the 45% to 60% range were anticipated by employers with 1,000 to 4,999 employees (n=114) with an increase of 57.4%, employers with 100 to 499 employees (n=73) with an anticipated increase of 51.0%, and organizations with 500 to 999 employees (n=50) with an expected increase of 49.6%. Employers with 10,000 or more employees (n=77) and organizations with 5,000 to 9,999 employees (n=42) expected increases of 19.0% and 11.5%, respectively.

Small employers were changing rapidly even though they did not have large numbers of hires. Remember that the toatl economy is driven by small employers, thus even aggregate small employers, especially at this rate, can be maor contributers to ob growth this year, which is probably the case.

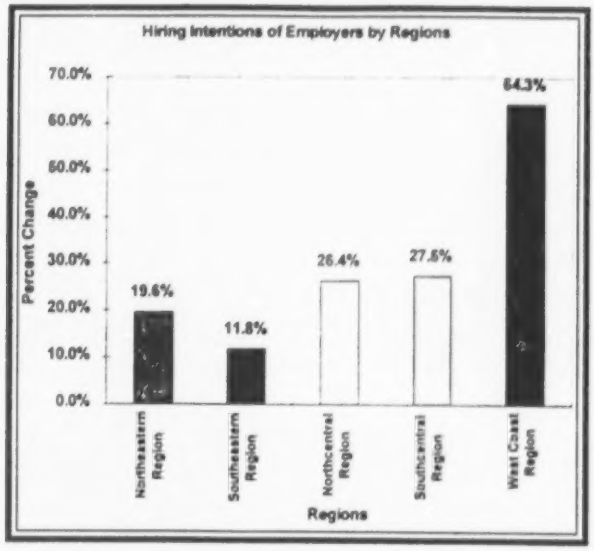


Employment by region was expected to differ substantially. States, especially those in the western and eastern coastal regions and the eastern coast of the United States, were experiencing more volatile job prospects than states in the central regions of the country where employment continues to increase at a regular pace. When reporting on anticipated changes in hiring from last year to this year, employers on the west coast (64.3%), southcentral region (27.5%), and northcentral region (26.4%) predicted the largest increases. Reporting somewhat lower hiring targets were employers in the northeastern region (19.6%) and southeastern region (11.8%).

Employer category likewise suggested a differentiation in change of job market for new college graduates. For this analysis, employers in allied categories were grouped.

The ***finance group*** (n=58) included accounting firms; and banking, finance, and insurance organizations. For this group, hiring intentions were expected to increase by 16.4%.

The ***engineering and machinery group*** (n=85) included aerospace and components; automotive and mechanical equipment; and engineering, research, consulting, and other



professional services organizations. An increase of 188.1% was anticipated for employers in these categories.

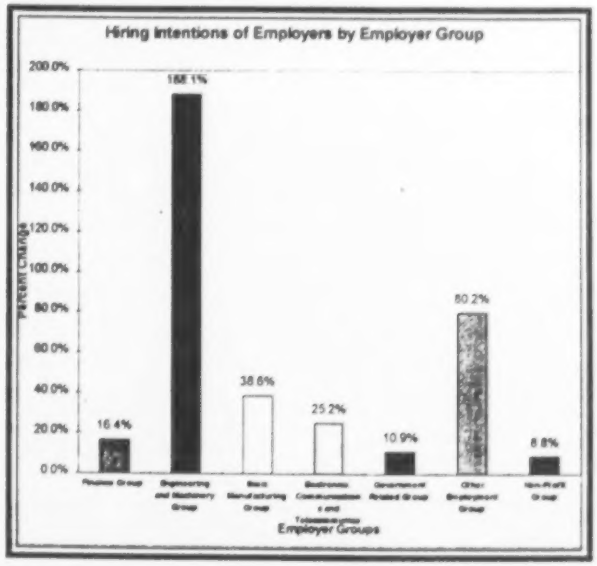
The ***basic manufacturing group*** (n=97) was comprised of employers in agribusiness; chemicals, drugs, and allied products; food and beverage processing; glass, packaging, and allied products; lumber, wood products, and furniture manufacturers; metals and metal products; petroleum and allied products; textiles, home furnishings, and apparel manufacturers; and tire, rubber, and allied products. Job openings were expected to increase by 38.6% by employers classified as members of the basic manufacturing group.

The ***electronics, communications and telecommunications group*** (n=77) contained organizations in communications and telecommunications including telephones, news papers, magazines, radio, and television; and electronics, computers, and electrical equipment manufacturers. An increase of 25.2% was expected by this group.

The ***government related group*** (n=64) included government administration and the military including federal, state, and local governmental agencies; hospitals and health care services; and public utilities including transportation. Government-related employers expected an increase of 10.9% in job opportunities.

The ***other employment group*** (n=46) encompassed employers in construction and building contractors; diversified conglomerates; hotels, motels, restaurants, and recreational facilities; and merchandising and retailing. This group of employers anticipated job opportunities to increase by 80.2%.

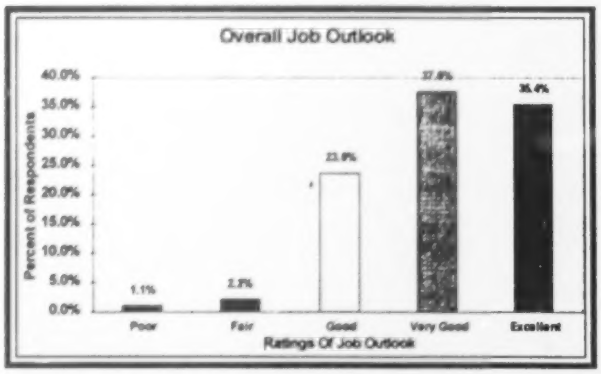
The ***non-profit group*** (n=32) covered social service, religious, and volunteer organizations. This group expected to provide the lowest increase in hiring of 8.8%.



Preparation remains a key to success for new college graduates in this year's job market. Surveyed employers commented that recipients of new college degrees who equipped themselves with academic training demanded by the market place and real-world work experiences will be competitive.

Predicted Overall Job Market

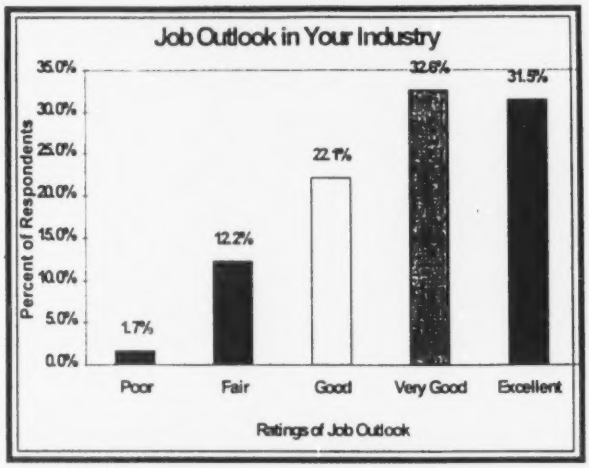
When predicting the ***overall job market*** for new college graduates this year (1997-98), employers described it generally as stronger than a year ago. The overall job market was characterized as "excellent" by 35.4% of the respondents, "very good" by 37.6%, "good" by 23.8%, and "fair" by 2.2% of the employers responding. Only 1.1% rated this year's market as "poor." The consensus was a "very good" job market for this year's graduates.



This year's figures show a marked improvement over 1996-97, when the overall job outlook for last year (1996-97) was portrayed as "excellent" by 9.4% of the respondents, "very good" by 21.9%, "good" by 59.4%, and "fair" by 9.4% of the employers responding. Last year, no employers described the job outlook as "poor." Last year, employers generally rated the market as "good."

Job Outlook By Industry

When analyzing the ***job outlook by industry*** for new graduates, employers were either more confident or less hopeful, depending upon their industries. The ratings received when employers examined the job outlook in their own industries were "excellent" by 31.5% of the respondents, "very good" by 32.6%, "good" by 22.1%, "fair" by 12.2%, and "poor" by 1.7%.



Last year, the job outlook, when rated by industry of the employer responding, was portrayed as "excellent" by 15.4% of the respondents, "very good" by 32.3%, "good" by 29.2%, "fair" by 16.9%, and "poor" by 4.6% of the employers responding.

A comparison was made of the ratings by employers for the overall job outlook and the job outlook predicted for their own industries. A significant difference ($t = -3.28$, $p < .01$) was found where the overall job market was viewed more favorably than the respondent's own industry. A breakdown of the difference scores revealed:

·30% – Overall economy was expected to be better than the employer's own industry.

·55% – No difference between the overall economy and the employer's own industry

·15% – Employers' own industry was expected to be better than the overall economy

Further analyses found that the following employer characteristics influenced these differences in ratings:

·Type: Electronics and communications organizations and a composite group, comprised of retailing, merchandising, and hospitality firms rated their own industries better than the overall economy. The overall economy was viewed as stronger than indus

try by representatives from government agencies, financial institutions, and automotive firms.

·Size: The smallest firms (<99) believed their own industry was stronger than the overall economy. Firms with 100 to 499 employees and organizations with 10,000 or more employees reported essentially no difference. Employers ranging in size from 400 to 9,999 employees rated the overall economy better than their own industries.

·Region: While employers from the Western and Eastern regions of the country reported a stronger overall economy, they also reported weaker prospects for their own industry compared to the job market for the Central region of the country. As a result, the Western and Eastern regions had larger differences when comparing the two ratings. Employers in the Central region appeared to be more stable in their views of the economy while employers on the coasts may be experiencing more volatility.

•Change in Hiring: Employers who are experiencing the largest growth in employment opportunities for new college graduates similarly rated both the overall economy and the job outlook in their industry - both were expected to be "very good" to "excellent".

Businesses and industries reporting ***an excellent job outlook*** (means = 1.0 to 1.49) for their own industries were hotels, motels, restaurants, and recreational facilities; lumber, wood products, and furniture manufacturers; and food and beverage processing.

A very good job outlook (means = 1.5 to 2.49) was anticipated this year by employers representing accounting firms; engineering, research, consulting, and other professional services; banking, finance, and insurance; diversified conglomerates; glass, packaging, and allied products; textiles, home furnishings, and apparel manufacturers; merchandising and retailing; electronics, computers, and electrical equipment manufacturers; communications and telecommunications including telephones, newspapers, magazines, radio, and television; social service, religious, and volunteer organizations; chemicals, drugs, and allied products; construction and building contractors; and automotive and mechanical equipment.

A good job outlook (means = 2.5 to 3.49) was expected by employers in agribusiness; metals and metal products; public utilities including transportation; hospitals and health care services; petroleum and allied products; aerospace and components; and governmental administration and military including federal, state, and local.

Factors Affecting Job Opportunities This Year

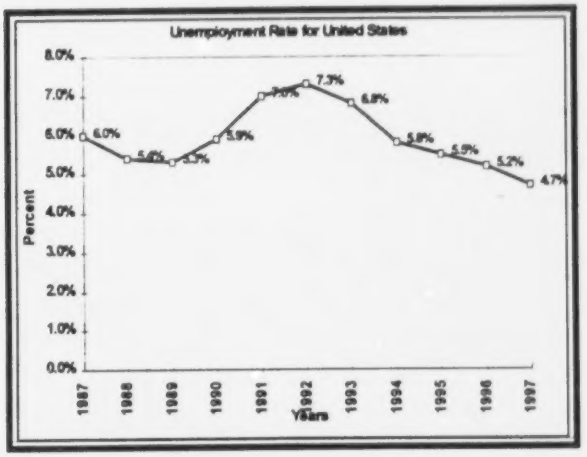
Hiring goals of employers offering jobs to new college graduates this year (1997-98) will be influenced by several factors, according to 61 employers commenting on this question. Prominent among the key factors were current economic conditions and general business expansion.

Continuing growth of the economy: The economic boom of the late 1990's has been characterized by steady financial growth and low inflation rates. These factors have supported excellent job opportunities for new college graduates. The current bright economic prospects are expected to continue, according to 17 employers responding to the survey.

However, small numbers of employers were warning against too much optimism (5). They caution that the economy may not continue to grow at its recent pace.

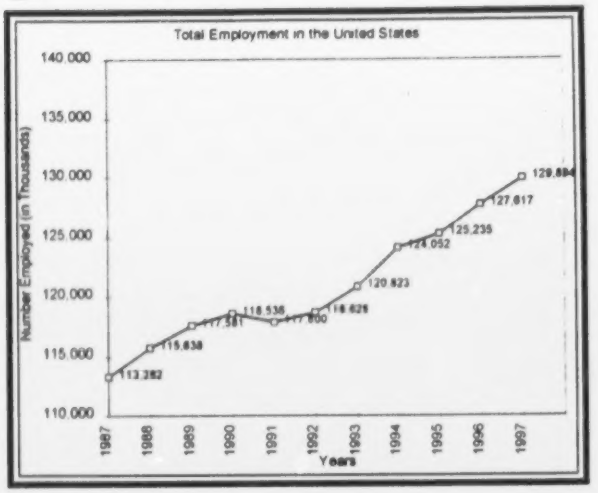
Unemployment rate: Of the respondents, 3 cited unemployment as a factor affecting job opportunities. During the last year from October 1996 to October 1997, the unemployment rate in the United States has declined to 4.7 percent, reported the Bureau of Labor Statistics of the U.S. Department of La

bor.[1] The unemployment rate in October was the 0.7 percent below a year earlier. From April through September, the rate had ranged from 4.8 to 5.0 percent. It makes sense that the lower the unemployment rate, the greater the chances for new college graduates to obtain jobs. However, not all new graduates may get positions that require a college degree.



Total employment: In October 1997, total employment in the United States was 129.9 million[1]. During the past year, total employment increased by 2.0 million people. Some of these new positions were acquired by new college graduates. In addition, growth in total employment created a greater probability of new graduates obtaining jobs requiring college degrees. Employers (6) mentioned increased job growth as a factor which is positively influencing employment prospects for new graduates.

Demand for technical graduates: Demand for technically trained new college graduates remains at a very high level, particularly new graduates with computer skills. According to employers (11), "It's a seller's market" for technical graduates. There is especially intense competition for talented new technical graduates. In addition, job opportunities for graduates in high tech fields are experiencing sustained growth. The result: demand is outpacing supply for technical graduates.



. New technical graduates requested most frequently by employers (3) are academic majors in computer and information sciences; engineering; business management and administrative services; and the health professions and related sciences.

Year 2000: Employers are searching for information systems staff who can help them fix year-2000 problems[4]. The focus has been on Cobol, C and C++ source code. There are terrible predictions of complete shutdowns of businesses and government agencies on January 1, 2000. Since computers were invented, programmers have designated only two digits for the year in a date. In many cases, these programs will not work correctly with dates after December 31, 1999. The challenge for programmers, and employers have begun recruiting many new staff for this project, is to find and redefine programming variables to accommodate four-digit dates and modify logic to properly calculate dates after January 1, 2000.

New technologies: Computers, robotics, and other advanced technologies are playing an important role in the growth of productivity and prosperity experienced by organizations through the U.S. New graduates who have prepared themselves with the training needed for these assignments will reap the benefits. Other new technologies men-

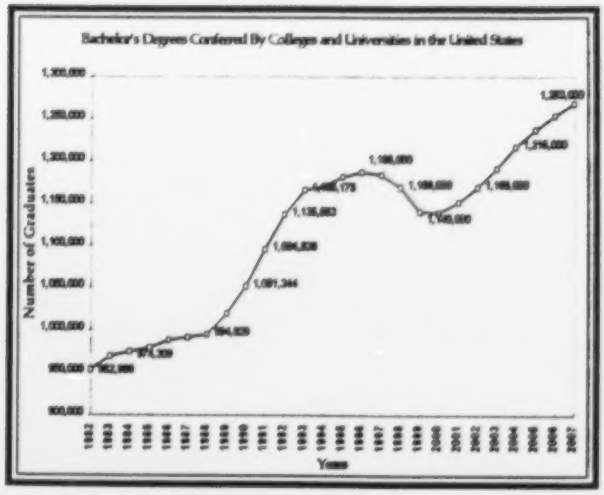
tioned by surveyed employers (3) included high-tech manufacturing, software and computer-related services, communication services, wholesale and retail trade of high technology goods, and biotechnology.

New business growth: Increased business growth is leading to additional employment opportunities for new college graduates in numerous surveyed organizations. Signs of business growth include increased volumes of new work, new products, recent acquisitions, reduced competition, and growing profits. Other instances of growth are expansion of business opportunities, backlogs in production facilities, new contracts, increased sales, rising retails sales, gains in target markets, and new products released.

Bachelor's graduates decreasing: Employers were indicating that there were not enough graduates applying for their job openings. An analysis of the data on anticipated new graduates suggests that this may be true. Fewer new bachelor's graduates may be available to employers.

For the first time in many years, the number of new bachelor's degree graduates will decline. In 1996-97, it is estimated that approximately 1,183,000 bachelor's degrees were granted by colleges and universities throughout the United States.[5] In 1997-98, 1,169,000 bachelor's graduates are expected to receive degrees. This anticipated decrease of 1.2% in bachelor's degree recipients will inevitably have an influence on the job market for new college graduates. Fewer new bachelor's graduates will yield more job openings for each new graduate.

This decline in new bachelor's graduates is expected to continue through 1999-2000, when 1,138,000 new bachelor's recipients are anticipated.



Master's degree graduates are expected to increase in 1997-98 to approximately 414,000. This is an increase of 1.0% from approximately 410,000 new master's degree recipients in 1996-97.

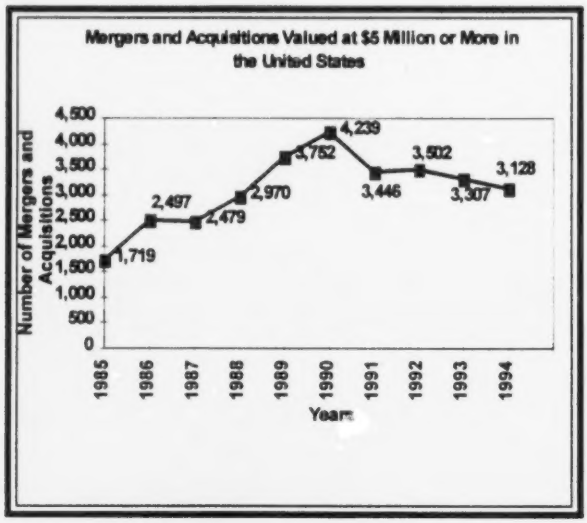
For doctoral degree graduates, an increase of 0.7% is expected in 1997-98. Approximately 44,500 new doctoral degree graduates are expected. In 1996-97, approximately 44,200 doctoral degrees were granted.

Mergers and acquisitions: In telephone conversations with employer representatives when collecting data for this survey, several mentioned that data on hiring results were not available. A frequent reason offered by these human resources executives was recent mergers or acquisitions affecting their organizations.

Corporate mergers, friendly acquisitions, hostile takeovers, and leveraged buyouts are typical news stories reported in the local and national media. No organization or industry, regardless of their financial strength or size, is immune from the threat of unwanted takeover. One of the consequences of a takeover is the shock waves caused by employee anxiety. During these times of financial manipulation, the hiring of new college graduates gets less attention than normal. In fact, in most organizations, according to surveyed employers, hiring of new college

graduates ceases altogether until the merger or acquisition is completed. New graduates should be aware of this situation.

According to the U.S. Bureau of the Census, mergers and acquisitions have been reduced since the peak period of 1990[1]. However, many businesses and industrial organizations are still facing the threat of an unwanted take-over.



Multicultural workforce: Personnel employed by most organizations in the future will become much more multicultural and more gender equal, according to survey respondents. The results will be increased pressure on colleges and universities to prepare new graduates representing all ethnic groups and each gender. Likewise, according to respondents (n=2), recruiters visiting college campuses will be seeking multicultural representation and gender equity among the new college graduates hired by their organizations.

Global investments: The era of growth in global business investments is continuing, as many additional corporations in the U.S. are becoming multinational. This is creating more work for more employees on the payrolls of U.S. corporations (n=3). The challenge for new graduates is accurately determining which organizations and which markets are adapting best and fastest to this new situation.

Percentage Change Expected In Starting Salary Offers

Percentage change in starting salary offers for new college graduates hired this year (1997-98) are expected to fluctuate only slightly from a year earlier (1996-97). During the previous five years, starting salary offers were expected to increase by -0.6% to 1.3% in 1992-93, 0.4% to 1.6% in 1993-94, 1.3% to 2.2% in 1994-95, 1.4% to 2.9% in 1995-96, and 3.5% to 4.0% in 1996-97.

The anticipated change in starting salary offers for this year (1997-98) will vary from no change to more than 10%, according to employer respondents. The anticipated percentage change, grouped by the levels of change, are provided below:

Anticipated Percent Change	Number of Respondents	Percent of Respondents
0%	40	25%
1-2%	13	8%
3-4%	55	34%
5-6%	28	18%
7-9%	8	5%
More than 10%	16	10%

When calculating percentage change expected in starting salary offers for new college graduates this year, responses from employers were grouped so an adequate number of employer responses were available for statistical purposes. The following groups were created with the subsequent academic majors in each:

Business Majors- accounting; financial administration; general business administration; hotel, restaurant, and institutional management; marketing/sales; materials and logistics management (purchasing, operations, and transportation); personnel administration and human resources administration; agriculture; and natural resources.

Engineering Majors - Chemical engineering, civil engineering, computer science, electrical engineering, industrial engineering, mechanic Social and Life Sciences Majors- advertising, communications, journalism, telecommunications, education, human ecology/home economics, liberal arts and humanities, chemistry, geology, mathematics, physics, al engineering, and packaging engineering

Social and Life Sciences Majors- advertising, communications, journalism, telecommunications, education, human ecology/home economics, liberal arts and humanities, chemistry, geology, mathematics, physics, nursing, retailing, and social science.

MBA Graduates
Master's Degree Graduates
Ph.D. Degree Graduates

Highest among anticipated percentage increases, all above 4.0%, for this year (1997-98) were starting salaries for MBA graduates (5.0%, n=23), engineers (4.1%, n=45), and Ph.D. graduates (4.6%, n=22).

Increases of approximately 3.0% to 4.0% were expected for graduates in the business majors group (3.5%, n=17) and the social and life sciences majors group (3.2%, n=33).

Salary offers for master's degree graduates were expected at 3.6% (n=14). The academic major of the master's degree graduate and any career-related work experiences obtained during college will have considerable influence on the employers' salary offers.

To be competitive last year (1996-97), some employers raised their starting salary offers at midyear by 5% to 10%, so new graduates were willing to accept their job offers. As this respondent indicated, "Hopefully, this year, we can hold it (salary increase) to 5%." This organization and other employers were suffering from salary compression problems due to some new graduates receiving substantial increases in starting salaries while current employees were not receiving similar increases.

Estimated Starting Salary Averages

The average starting salaries for most academic majors have been listed below. New college graduates, however, should recognize that their market value may vary from these averages. Factors known to influence employer job offers are: prestige of the institution granting an academic degree, geographical location of the position offered, size of the employer extending the offer, cost of living conditions, prior career-related work experiences, academic record achieved, and a multitude of personality characteristics. Starting salaries for advanced degree graduates are expected to average $44,666 for MBAs, $43,645 for master's degree graduates, and $58,109 for doctoral degree graduates. Depending upon the academic majors of the advanced degree graduates and any related work experiences accomplished, the starting salaries for individuals could vary from these averages.

Starting salary averages anticipated for 1997-98 graduates were calculated by using data on actual starting salary offers and acceptances reported in the ***Interim Salary Report 1996-97*** published by the Collegiate Employment Research Institute at Michigan State University, East Lansing, Michigan (November 5, 1997), and the ***Salary Survey: A Study of 1996-97 Beginning Offers*** published by the National Association for Colleges and Employers, Bethlehem, PA., in September 1997. Selected academic majors from each of these reports were used.

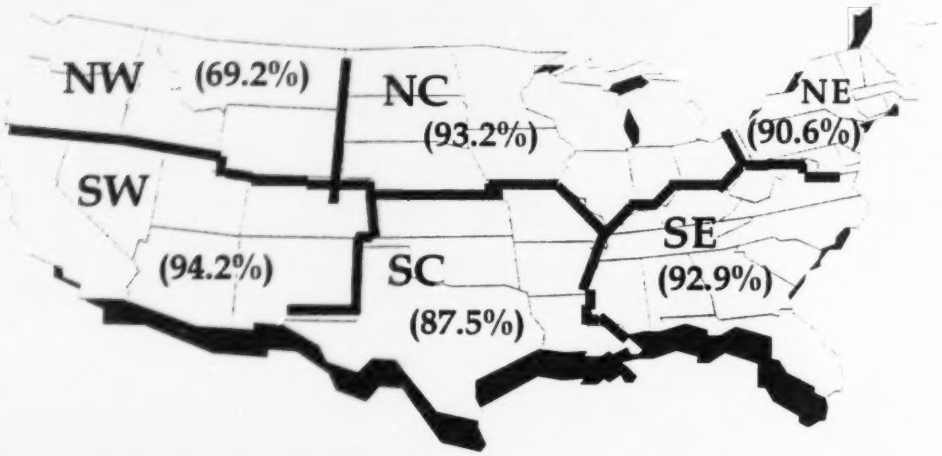
Estimated Average Starting Salaries and Ranges

(Listed from highest to lowest)

for new college graduates in 1997-98

Bachelor's Degree Graduates Academic Majors	Estimated Aveage Starting Salary	Percentile 10th	90th
Chemical Engineering	$44,557	$39,558	$48,719
Electrical Engineering	$41,167	$35,394	$46,845
Mechanical Engineering	$39,857	$34,353	$45,492
Industrial Engineering	$39,462	$33,728	$44,763
Computer Science	$38,741	$31,230	$45,388
Physics	$36,692	$29,412	$43,344
Materials and Logistics Mgt. (purchasing, operations, and transportation)	$36,190	$25,875	$43,470
Packaging Engineering	$36,089	$29,148	$45,804
Chemistry	$35,227	$20,640	$53,664
Civil Engineering	$34,385	$28,732	$41,224
Mathematics	$33,180	$22,704	$42,353
Financial Administration	$32,430	$24,323	$41,400
Nursing	$31,802	$24,685	$41,280
Geology	$31,273	$24,768	$40,248
Accounting	$31,209	$24,840	$36,225
General Business Admin.	$30,373	$21,735	$40,365
Marketing/Sales	$29,012	$20,700	$36,225
Human Resources Management	$28,003	$20,700	$36,018
Agriculture	$27,710	$20,700	$36,225
Human Ecology/Home Economics	$27,339	$21,466	$34,056
Retailing	$26,650	$22,704	$30,960
Communications	$26,392	$19,608	$35,088
Natural Resources	$26,035	$17,595	$33,120
Hotel, Rest. Inst. Mgt.	$25,938	$22,770	$30,015
Advertising	$25,485	$18,576	$31,992
Journalism	$24,588	$18,576	$31,992
Liberal Arts/Arts & Letters	$24,578	$15,480	$31,992
Social Science	$24,170	$15,480	$34,056
Education	$23,837	$18,576	$29,515
Telecommunications	$22,563	$15,480	$31,992

Advanced Degree Graduates	Estimated Starting Salary	Percentile 10th	90th
MBA	$44,666	$31,500	$58,800
Masters	$43,645	$31,370	$49,995
Ph.D.	$58,109	$49,790	$73,325



Employment Opportunities For Each Geographical Region Of The United States

Employment opportunities available in 1997-98 in major geographical regions of the United States for new college graduates were rated by recruiters responding to this survey. Based upon their experiences, recruiters rated each geographical region of the nation for extremely high, high, medium, low, or no availability of employment opportunities.

According to employers responding to this survey, ratings were anticipated at the "high availability" or "medium availability" levels for all geographical regions of the United States this year (1997-98). Ratings for job availability in each geographical region of the country for the last three (3) years are provided below:

	Years		
	1995-96	1996-97	1997-98
Northeastern region	53.8%	78.6%	90.6%
Southeastern region	75.4%	85.1%	92.9%
Northcentral region	73.8%	94.4%	93.2%
Southcentral region	68.3%	73.1%	87.5%
Northwestern region	48.1%	62.9%	69.2%
Southwestern region	58.2%	77.7%	94.2%

These percentages include employers reporting extremely high, high, and medium job availability levels. Ratings received by all regions this year (1997-98) were at the same level or slightly higher than ratings received a year earlier (1996-97).

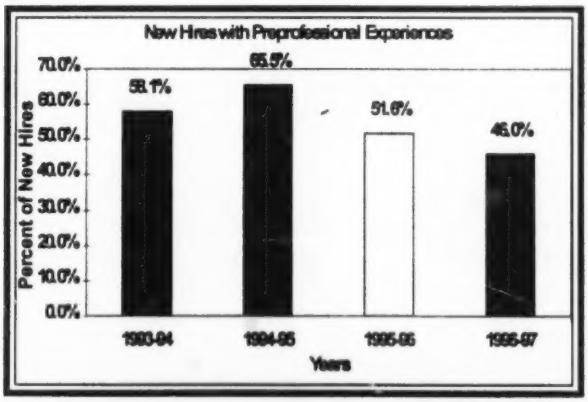
The northeastern, southeastern, northcentral, southcentral, and southwestern regions of the country were expected to have higher levels of job availability. The northwestern regions were predicted by surveyed employers to have medium job availability.

New Hires With Career-Related Preprofessional Experiences

Of the new college graduates hired by surveyed organizations last year (1996-97), 46% had career-related preprofessional experiences (cooperative education, internship, and/or practicum positions). The new hires obtained their preprofessional experiences with many organizations, not necessarily the surveyed employers that hired them. The exact number of new college graduates who completed career-related preprofessional experiences prior to graduation was not requested this year. Of the respondents, 118 replied to the question on hiring of new college graduates with career-related preprofessional experiences.

Of the employers responding, 22.0% reported that 60-75% of their new hires with preprofessional career-related work experiences (n=26). Of the respondents, 87.3% hired new graduates with at least some preprofessional experiences (n=103).

Of the new graduates hired by surveyed organizations in 1993-94, 1994-95, and 1995-96, 58.1%, 65.5%, and 51.6%, respectively, had career-related preprofessional experiences.



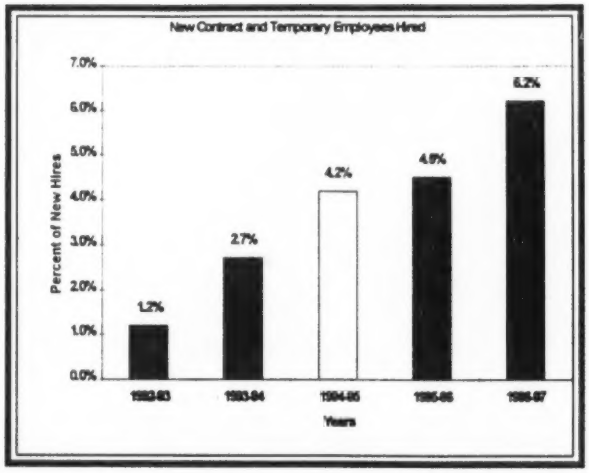
New Contract and Temporary Employees Hired

Among the new college graduates hired last year (1996-97) by 117 surveyed organizations, 573 were hired in contract or temporary positions (full-time equivalents). Contract and temporary personnel represented 6.2% of the 9,194 new hires in surveyed organizations for 1996-97.

In the previous four years—1992-93 to 1995-96, new contract and temporary personnel represented 1.2%, 2.7%, 4.2%, and 4.5%, respectively, of the new hires in surveyed organizations.

Competencies and Skills In Highest Demand

After reviewing the recruitment efforts of their organizations on college and university campuses last year (1996-97), 67 surveyed employers summarized the job competencies and skill areas that were hardest to find. Most significant among the abilities and talents listed by employers were engineering, computer-related occupations, and select business and management assignments.



The engineering majors (33) mentioned most frequently by surveyed employers were: computer engineering, chemical engineering, mechanical engineering, manufacturing engineering, electrical engineering, radio frequency engineering, hydraulic engineering, software engineering, welding engineering, geoscience engineering, petroleum engineering, analog design for electrical engineering, project engineers, and structural engineering.

The computer-related occupations (33) were computer programmers, systems analysts, information technology majors, visual basic computer programming language, management information systems majors, computer science, UNIX programmers, C++ programmers, COBOL programmers, computer aided design (CAD), and networking managers.

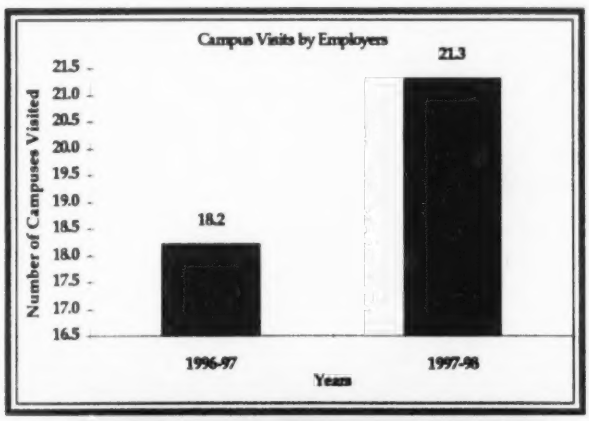
The business and management majors (5) mentioned by employers were accounting, sales and marketing, materials science majors, MBAs with experience in manufacturing or human resources, and insurance majors.

The academic skill areas and job performance competencies (32) cited by employ

ers were writing skills, speaking and presentation skills, telephone communication skills, supervisory and management skills, and warehouse management skills. Areas of personal focus noted by employers were the desire for a long-term commitment, a strong work ethic, risk takers, solid self-motivation, and new graduates with common sense.

Campus Visits For Recruitment

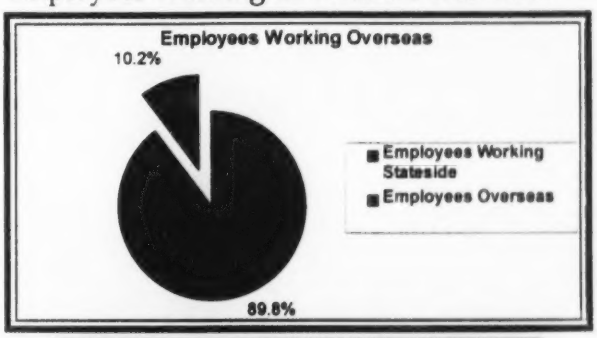
Campus visits for 176 surveyed employers were expected to increase by 15.0% when recruiting for new college graduates this year (1997-98). Surveyed employers reported that approximately 18.2 campuses, on the average, were visited by each organization for recruiting last year (1996-97), and an average of approximately 21.3% campuses will be visited by the respondents for recruitment purposes this year (1997-98).



Employees Working in Overseas Locations

Among the 3,136,550 salaried employees (excluding clerical and laborer staff) on the payrolls of surveyed organizations last year (1996-97), 319,681 were working in overseas locations. These employees were working beyond the continental boundaries of the United States, so the total employees working within the United States for these employers was 2,816,869 full-time equivalent salaried staff.

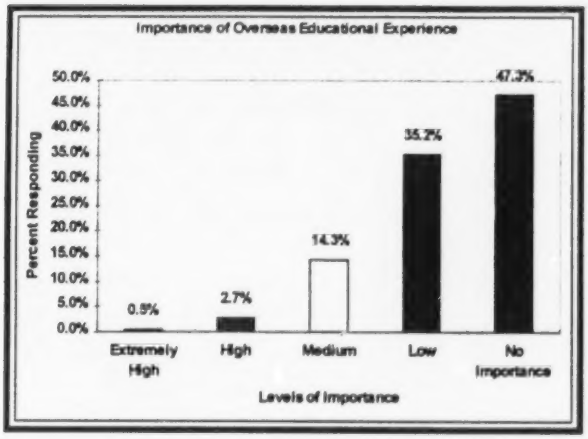
Employees working overseas represented approximately 10.2% of the employees working for surveyed organizations. A total of 183 organizations reported data for employees working in overseas locations.



Importance of Overseas Educational Experiences

The importance of overseas educational experiences for college students was accentuated most notably by surveyed organizations with global commitments in worldwide locations. Of the 147 employers responding, 1% reported that overseas educational experiences had "extremely high" importance in their organizations when college students were recruited for full-time positions. The level of importance for overseas educational experiences was "high" for 2.7% of the respondents and "medium" for 14.3% of the employers answering this question.

A "low" importance rating was given to overseas educational experiences by 35.2% of the respondents, and a rating of "no" importance was conferred by 47.3%. Businesses, industries, and governmental agencies with only local facilities found it difficult to see a need for overseas educational experiences if new graduates who wanted to work for their organizations.



Generally speaking, according to employers rating overseas educational experiences as very high, these experiences make people more flexible, more cooperative, and easier to work with in multi-cultural work environments.

With more organizations expanding into worldwide locations, college graduates can expect to see an increased emphasis on overseas educational experiences by employers. Most notable among recruiters with global placement opportunities was an increase in demand for second language skills, especially French, Spanish, and Chinese.

In some organizations, overseas educational experiences can be a deciding factor in the selection process, if all other job competencies are comparable.

Competencies and Skills Acquired While Studying Abroad

The competencies and skills acquired by college students while studying abroad were investigated. The intent was to determine the significance of overseas educational experiences for college students. Employers responding (n=32) to this question categorized the list of abilities, talents, and aptitudes obtained by college students while studying abroad into three (3) classifications: foreign language competencies, sensitivity to people of other cultures, and improved communication skills and personal competencies.

Development of a foreign language competence (at least one or more) was frequently cited by employers (12). Recruiters also mentioned the need for a familiarity with local customs which can be obtained while studying overseas.

A sensitivity to people of other cultures was often mentioned by employers (20). This cultural awareness also translated into better treatment of colleagues. Employers viewed overseas educational experiences as cultural diversity training, and from these experiences, college students gained a significant understanding of a different culture. Other attainments included cultural acceptance, cross-cultural expertise, knowledge of appropriate manners and acceptable or rude conduct in another culture, an ability to deal with people of other cultures, an ability to be more open-minded, and to be respectful and knowledgeable of other cultures.

Knowledge of different business practices (6), international trade arrangements, appropriate marketing techniques, global perspective on management styles, and country-specific cultures and business customs were likewise learned.

Other acquired competencies (19) were improved interpersonal skills, a growth in confidence and development of flexibility, an increased ability to adapt, better thinking skills, and improved interpersonal and oral communication skills.

Additional proficiencies were an ability to overcome barriers, enhanced problem solving skills, and a general ability to change (3).

Supplemental gains (6) included independence, risk-taking aptitudes, a generally well-rounded demeanor, broadened life experiences, and extra common sense that is not taught in college.

Foreign Language Competencies Required by Employers

Foreign language competencies were required when hiring new college graduates for selected positions, according to 24.2% of the surveyed organizations responding to this question (n=148).

The foreign languages competencies required for positions available with surveyed organizations (n=23), in descending order of mention, were: Spanish, French, German, Chinese, Arabic, Russian, and Asian languages (i.e. Japanese, Korean, etc.).

The positions requiring foreign language competencies were: marketing and sales, finance, manufacturing, engineering, chemistry, human resources, and international MBA assignments. Additional positions listed by employers were benefits service representatives, pension service representatives, and reporters.

Within the United States, Spanish language competencies were required for new college hires working in health care facilities or caseworker positions in Florida and other states bordering Mexico.

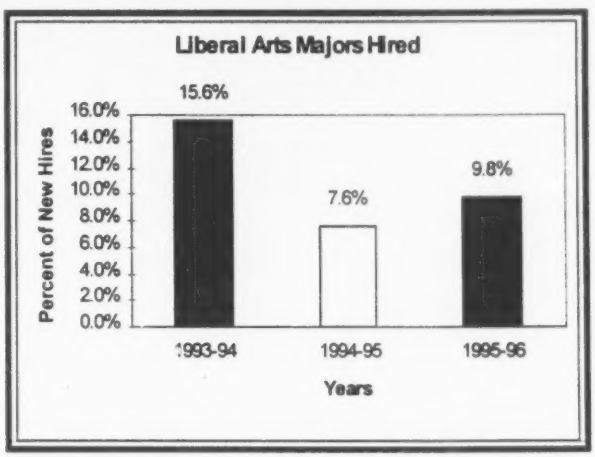
Other employers noted the demand for help desk associates and customer service representatives possessing a foreign language competency. Typically, new college hires in these positions need the Spanish language skill and computer literacy.

Hiring of Liberal Arts Graduates

Of the 175 surveyed employers responding to this question, 89 hired liberal arts graduates (i.e. new graduates with academic majors in English, history, foreign languages, social sciences, general communications, etc.) for various assignments available in their organizations. Employers hiring liberal arts graduates represented 50.9% of the organizations reporting their hiring procedures.

Data on actual numbers of new liberal arts graduates hired by surveyed employers were not collected this year. In previous surveys, employers found it difficult to track which new hires were liberal arts majors.

Approximately 38.4% of the new college graduates receiving bachelor's degrees in 1997-98 from colleges and universities throughout the nation are expected to be liberal arts majors[6]. Liberal arts graduates, for this calculation, were defined as bachelor's degree recipients with academic majors in social sciences and history, communications, psychology, English language and literature, visual and performing arts, liberal arts and sciences, general studies, humanities, multi/interdisciplinary studies, foreign languages and literature, philosophy and religion, theological studies and religious vocations, and area, ethnic, and cultural studies.



Among new graduates hired in 1993-94 through 1995-96 by surveyed employers, 15.6%, 7.6%, and 9.8%, respectively, were liberal arts majors.[7] In 1994-95, surveyed employers reported that 1,160 of 15,323 new hires were liberal arts majors. Of the new college graduates hired in 1993-94 by surveyed employers, 2,607 of 16,677 new college hires were liberal arts majors.

Positions Available For Liberal Arts Graduates

Liberal arts graduates were hired most frequently by surveyed employers (n=42) for the following positions: sales and marketing, human resources, actuarial, underwriter, public relations/communications, claims representative, management trainee, customer service, training consultant, computer programmer, counselor, caseworker, collections representative, radio and television commercial producer, procurement, budget analyst, business analyst, food service operations, writer/copy editor, broadcasting, merchandising management, researcher, dispatcher, or rental sales representative.

Internships and Practicums For Liberal Arts Graduates

To help bridge the gap between academic preparation and a career "in the real world," the option of internships and practicum experiences was investigated for liberal arts graduates. Surveyed employers were invited to offer their viewpoints on this topic (n=46)

Any professional-level positions in a corporation, other than clerical assignments, were recommended as excellent preparation for professional-level job responsibilities. In the opinions of surveyed employers, any internships are helpful for giving college students a "taste of the real world." Any exposures to the business environment that were results-orientated, rather than market-driven, and maybe some of the more physical assignments were advocated.

College students were encouraged to take as many internships as they could, to go to as many informational meetings given by employers as possible, to think about the work activities they enjoy doing and the ones they do best, and to consider career opportunities that require their skills and interests.

Any practical work experiences (i.e. volunteer, internships, etc.) were helpful, according to employers. These experiences were not only helpful for the employer when training college students for work assignments, but these experiences were also beneficial for the students who are choosing their fields of study and career options.

From the employers' viewpoint, colleges and universities should encourage more internships for students, and these experiences should be offered with low expense or no cost to employers.

Cooperative education, internship, and other work experience programs were frequently the principal sources of new college graduates hired in certain organizations.

Computer-related assignments were particularly important to surveyed organizations. Any professional-level positions in a corporation, other than clerical assignments, were recommended. On-the-job experiences with the Microsoft office suite of products were commonly mentioned (i.e. MS Word, MS Excel, MS Access, etc.). Experiences requiring or providing computer skills and training, software responsibilities, and other personal computer proficiencies were highly desired by employers.

Skills And Competencies Possessed By Liberal Arts Graduates

When surveyed organizations were recruiting liberal arts graduates, they were

seeking certain skills and competencies from these individuals. Most important to the employers responding (n=33) were a solid grade point average, excellent communication skills, demonstrable computer literacy, and the ability to learn.

The communication skills (42) desired by employers included oral and writing skills, good English grammar abilities, good copy editing skills, and satisfactory listening skills. Other related communication skills were good people skills, excellent interpersonal savvy, maturity, a clear customer focus, and refined customer contact skills.

Leadership and organizational abilities (17) were also important to employers. Related expertise favored by employers was perseverance, teamwork, management skills, and good follow through.

New graduates with keen intelligence (16) were given premium consideration. This aptitude was described by other employers as high academic achievement, the ability to think critically, especially the ability to think "out of the box", a good grade point average, the ability to learn quickly, the ability to think on your feet, and broad interests.

Other requests made by employers on liberal arts graduates were the creative ability to solving problems (8), analytical competencies, quantitative and research proficiencies, and logical decision-making abilities.

Liberal arts graduates with practical work experiences (8) were rated distinctively higher by employers. Particularly important were previous career-related work assignments and volunteer experiences in assignments where the college students could practice their career interests. An example was the appeal for new graduates to obtain related work experiences in retailing.

Supplemental qualifications commonly accepted (3) by employers were flexibility, the ability to flow with changes, a clear career focus and vocational orientation, and a willingness to work in the environment afforded by the employer.

Computer literacy is not the sole domain of technical graduates. Liberal Arts graduates are also expected to be computer literate, able to enter data, and possess and sustain a curiosity about technology.

Key Factors Considered When Interviewing

When surveyed organizations were conducting interviews with new graduates on college campuses, certain key factors were considered as very important during the evaluation process. The most significant elements of successful interview, according to surveyed employers (n=74), were:

Real-world work experiences (33): For new college graduates who want to land the top career opportunities available with prospective employers, it is very important that they obtain pre-professional work experiences, relevant cooperative education assignments, entrepreneurships, internships, and/or volunteer positions that test their potential. Employers were very interested in college students who have thoroughly investigated their career alternatives and spent significant time on task with their preferred career interests.

Technical skills (12): The breadth of technical competence was high on the list of factors examined by employers. Another dimension of this factor was knowledge of the automated technologies profession and technical wisdom. New graduates who have the ability to relate their educational and internship experiences to the employers' world were highly desired. In addition, an ability to manage different technical tasks was essential.

Grade point averages (24): One measure of academic abilities possessed by graduating students was the grade point average attained. Employers sought candidates with good grade point averages during a

student's college career. Without other quantifiable measures to consider, employers were limited to use of grade point averages as a basic standard for success during college and potential for achievement on the job.

Academic preparation (7): Especially meaningful to employers is the academic training received by college students. Degrees obtained in academic fields related to the employer's job openings were important. Another key factor is the graduates raw knowledge.

Leadership qualities (14): The leadership roles held by college students with extra-curricular clubs and campus activities were clues to job performance potential for employers. New graduates who have been in leadership positions and can list their successful accomplishments were more appealing to employers. Experiences with student publications were also viewed favorably. An entrepreneurial attitude was desired too.

Percent of college expenses paid (3): Graduating students who have worked their way through college were winners, as far as employers were concerned. From the employer's perspective, this factor is a demonstration of the graduate's work ethic and self-motivation.

Personal presentation (24): The way new graduates present themselves to employers during the interview is important. Personality, maturity, professionalism, personal impact, good-nature, and personal hygiene were other examples of personal factors cited by employers.

Attitude (10): The confidence and positive attitude displayed by the new graduates was significant too. Employers reported these factors as self-confidence, poise, and self-esteem. A portion of humility was recommended also.

Communication skills (33): The applicant's ability to converse during the interview is critical. Also important for successful job performance in most organizations were the abilities to communicate effectively with others, to perform satisfactorily as a public speaker, to write well, to listen attentively, and to positively influence others toward achievement of group goals.

Furthermore, employers w during the interview focused on interpersonal skills. Can the new graduate adequately answer questions? Does the new graduate ask intelligent and interesting questions?

Computer skills (3): Technical abilities were investigated by employers throughout the pre-employment process. During the interviewing phase of recruitment, employers frequently asked questions related to the graduate's prior experiences with computers, email, software, and hardware applications.

Problem analysis and analytical thinking (9): Another measure used by employers is a graduate's initiative. Employers wa... a proven skills, so graduates need to cite examples. Critical thinking is also measured with problem-solving situations as an element of the interviews.

Customer service orientation (4): It is important for new graduates to search their prior work experiences for assignments where their attention to customer needs was tested and successful. Employers know that customers expect a friendly greeting and a higher level of satisfaction. Otherwise, the customers will take their business elsewhere.

Adaptability, drive, and initiative (14): Enthusiastic, bright, and energetic, but humble, were other words used by employers to describe the new graduates they were seeking. Employers want new graduates who will fit within their corporate culture. In addition, employers wanted team players who were flexible, honest, and adaptable.

Proven track record (4): Employers were searching the answers given by new graduates in interviews for documented evidence of the applicants' previous conduct on the job, successful work performance behaviors, and abilities to get excellent work results.

Ability to learn (5): Examples provided by new graduates about prior work situations that demonstrated an ability to learn were considered important by employers. According to recruiters, new hires in their organizations will encounter numerous predicaments in the normal flow of their work activities which will require an enthusiastic eagerness to acquire new knowledge or master additional understanding.

***Preparation for interviewing (13)*:** If new graduates expect to be successful when interviewing they must be prepared. An ample knowledge about the organization conducting the interview is a necessity. Be on time for the interview. Actually, being a few minutes early would be advisable. Employers reported that punctuality weighed heavily in their measuring standards. Other suggestions: be familiar with the work performed by the employers, dress the part, ask for the job, and ask good, intelligent questions.

***Passion for work (5)*:** A convincing work ethic is desired. Employers wish to determine if new graduates want to work or just get paid. Employers are seeking new graduates who enjoy working, thinking, listening, and expressing themselves. The number of times new graduates have missed classes is meaningful to employers. Other factors were examined including the new graduates employment record.

***Career interests (10)*:** Employers pleaded for new graduates who were organized and had a sense of direction. New graduates ought to have a serious interest in the career opportunities offered by employers. The employers want new hires who were highly motivated, because they want the new graduates to develop successful careers in their chosen professions. Realistic expectations were desirable too. Employers want new graduates who were goal driven and interested in the career offerings provided by the employers.

Changes Expected During The Next Five Years

During the next five (5) years, thework environment encountered by new college graduates in surveyed organizations was expected to change in several ways. Among the most conspicuous, both use of contract and temporary employees were expected to increase. Of the employers responding (n=172), 43.0% expected no change, and 42.4% expected some increase in hiring of contract employees. A slightly higher response was received for use of temporary employees. No changes was expected by 42.0% and some increase by 46.0%.

Some increase in starting salary offers for new college graduates was also expected by 172 of the responding employers . Of the respondents, 80.8% anticipated some increase. No change was anticipated by 12.2% or the respondents.

Either no change (55.0%) or some increase (36.7%) was expected for hiring bonuses. A few employers (17.4%) expected substantial increases in hiring bonuses (n=169).

No change (38.9%) or some increase (43.1%) was expected in performance-based pay. Expecting a substantial increase in performance-based pay were 17.4% of the respondents (n=167).

A majority of the employers (57.4%) expected training opportunities to increase for new college graduates. Of the respondents, 27.3% expected no change, and 14.8% anticipated substantial increases in training opportunities (n=176).

No change in family-related employee benefits were expected by a majority of employers (54.3%). Some increase was predicted by 42.3%, and substantial increases were planned for 2.9% (n=175).

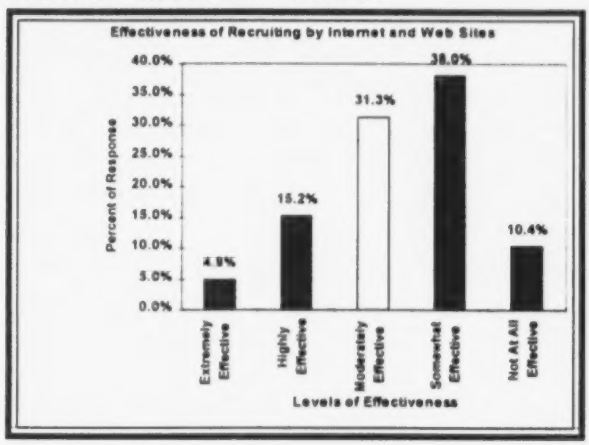
Medical and dental insurance were not

expected to change by 72.7% of the employers. Some increase in medical and dental insurance coverage was anticipated by 23.3% of the respondents (n=176).

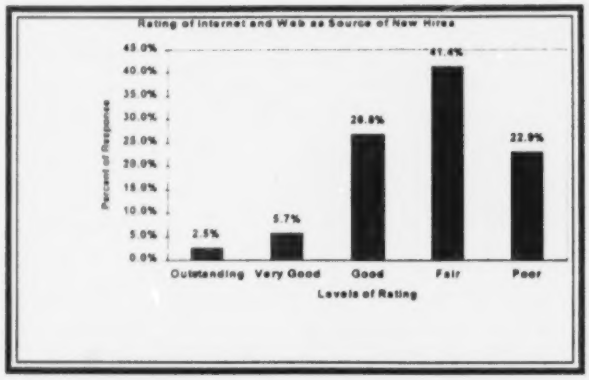
Life insurance coverage was not anticipated to change by 81.7% of the employers. Some increase was expected by 16.6%, and some decrease by 1.7% (n=175).

Effectiveness Of Internet And Web Sites For Recruiting

According to surveyed employers (n=163), the Internet and web sites were "moderately effective" methods used for recruitment of new college graduates. The Internet and web sites were rated as "extremely effective" and "highly effective" methods by 4.9% and 15.3%, respectively, of the respondents. Another 31.3% of the employers rated the Internet and web sites as "moderately effective," 38.0% as "somewhat effective," and 10.4% as "not at all effective."



Most of the employers responding to this survey (68.2%) rated the Internet and web sites as "good" or "fair" sources of new hires. Of the respondents, 2.5% rated the Internet and web sites as "outstanding," 5.7% as "very good," 26.8% as "good," 41.4% as "fair," and 22.9% as "poor" sources of new hires (n=156).



Changes In Recruitment Caused By the Internet

Several changes have occurred in the campus recruitment efforts of surveyed organizations because of information obtained from the Internet (n=21).

Because of the Internet and web sites, brochures and campus information sessions are less important, although employers have more visibility on campuses. Graduating students can go to an organization's web site for most information. Prior to campus interviews, graduating students are more knowledgeable about an organization which maintains a web site. According to employers, the Internet is an excellent resource for helping graduating students understand an organization. Thus, more advertising money is directed at the web, and less is focused on the print media. The web site and email addresses for organizations are provided on all information given to graduating students.

The home pages and web materials maintained by employers must look more attractive, because most graduating students refer to the organizations' home pages. Several employers noted that the looks and contents of their home pages had to be improved. Included on many employer home pages is the schedule for recruitment activities.

Communications with graduating students are accomplished with more email and less regular mail. More advanced communi

cation can be accomplished with students to inform them about an organization's visit to their campus. Information is received quicker from graduating students and in better condition than by fax. Employers expect all new graduates to communicate by email and be thoroughly familiar with the Internet.

Career services, according to employers, should not be afraid of Internet resources replacing them. The career resources centers on most college campuses will not be made obsolete.

With campus and career services web sites, it is easier for employers to locate contact information. In addition, access to web databases of resumes maintained by career services is easier. With resume searches available from career services databases, fewer resume books and fewer telephone calls are needed to placement offices.

Campuses and graduating students at schools that are not visited by employers can be reached via the Internet. Even if the organizations do not personally visit the campuses, graduating students can be contacted and recruited.

Prescreening of applicants can be achieved by using the Internet, consequently recruiters can spend more time with their "chosen" prospects.

Some campuses are no longer visited by employers because their organizations can get resumes of graduating students off a web site. This is a major cost savings for the employers.

Despite the potential uses of web sites and the Internet, some recruiters nevertheless like the personal contact and information acquired during on-campus visits.

Advantages and Disadvantages Of Internet And Web Sites For Recruiting

According to campus recruiters (n=60), there are advantages and disadvantages when recruiting new college graduates through the Internet or a web site.

Advantages: A broader audience can be quickly reached (30) through use of the Internet. In addition, a tremendous volume of resumes can be collected from the Internet, so there is a larger candidate pool of different applicants to review for available job opportunities. This can aid employers when determining individuals they would like to interview on campus.

A larger volume of candidates can be recruited from a wider geographical area without the associated travel costs.

Faster and easier access to interested students from a nationwide audience is possible (14). Speed of response and wider geographic coverage are important to most national employers. Web databases are readily available to employers for on-line searches.

For small, local organizations, advertising on the Internet may not reach their target audience (2).

With the Internet or a web site, employers can screen applicants before their first face-to-face contact (7). This is desired, according to employers. Preselection of graduating students prior to interviewing is preferred.

The recruiter has the opportunity to look for specific skills, qualifications, and experiences when conducting searches on the web (4). If web sites are well-organized, this can be a fast and effective way to identify prospects for job openings.

The cost savings and time efficiencies when using the Internet are outstanding (23). If an employer wants to recruit during off hours, they can do so with success. Some employers would rather recruit over the Internet than participate in campus career fairs.

It is easier to communicate with placement offices and graduating students (7). According to employers, correspondence seems to flow more quickly. Candidates can research an organization through a web site to determine whether the employer really fits

what they are seeking. More information can be distributed about employers, and this material can be revised and updated very rapidly. Therefore, graduating students know more about the employers through use of web materials.

Videoconferencing was cited as an option for campus interviews (2). Employers noted that ultimately, a face-to-face contact with a job applicant was favored.

There is less risk of error from email messages, follow-up questions can be quickly resolved (5), and employers can provide further information about available positions and geographical locations with job openings.

The Internet is an alternative to existing recruitment efforts already in place (6). It is another advertising source.

More information is available on the Internet (5), so more informed applicants are located. Usually respondents from the Internet or a web site are reasonably well-qualified and computer friendly. This is meaningful to employers.

Change of recruitment materials can be quickly accomplished (3) with minimum annoyance and lesser cost than mailing employer literature to hundreds of colleges and universities nationwide.

Foreign nationals can be effectively reached to return to their home country for employment (1)

Disadvantages: The employers do not know if the graduating students are interested in their organizations. On occasions, there are too many candidates to realistically review (5).

For new graduates with limited experiences, it is a disadvantage for both sides (4). Employers have not had the chance to screen the applicants at a career fair or during campus interviewing. Graduating students do not always present themselves effectively when communicating by email. This channel of communication is customarily too casual.

The personal touch is missing when using the Internet (22). Employers cannot sell their organizations like they can during campus visits. It is more difficult to get to know the graduating students. There is less interpersonal contact. Employers will miss seeing their candidates, but after a day at a career fair, how many candidates do employers remember anyway.

Focusing of web advertisements on particular geographical locations is difficult to achieve (3). Furthermore, it is a challenge to get graduating students to the web site. Using the "shot gun" approach with applications becomes the pattern— randomly scattering resumes and relying on chance for locating employment.

It is time-consuming to learn new technologies and stay up-to-date (5). If a web site is not well-organized, a recruiter can spend an hour or more and not get anything from the site.

A nice "clean" resume is not always easy to get from job applicants through Internet channels (5), and in certain instances, computer compatibility issues are an obstacle. Likewise, resumes of graduating students rapidly get out of date.

The response volumes when listing job openings, especially for technical positions, are not very high (5), so the chances of finding the right candidates are quite low. Often, the candidates obtained through the web or Internet resources lack pre-requisite skills for available positions. The bottom line: success from recruitment through web resources is quite low.

Relocation expenses are higher (3). Employers prefer not to incur relocation expenses, but the wide scope of the Internet causes employers to get many inquiries from a large geographical area.

The administrative costs for prescreening and reviewing resumes are higher (13), because so many applicants contact employers when non-technical jobs are posted.

Employers cannot be sure if graduating students have been selective or are simply blanketing job choices ads (2). More commitment from graduating students, such as a telephone call or personal visit, would more adequately convince employers of their interest.

Every graduating student does not have access to the Internet or a web site (4), so those applicants who are not on the Internet lose out. Greater access to the Internet and web on college campuses would help remedy this situation.

Higher incidents of fraud are possible (5), since there is less opportunity for face-to-face contact. In addition, the Internet, like a resume, only shows the good and is not as likely to show the flaws. The reliability of the information found on the web may be questionable.

FOOT NOTES

[1] U.S. Department of Labor. 1997. ***Bureau of Labor Statistics Data***.. November 17. Washington, DC: http://stats.bls.gov/cgi-bin/surveymost.

[2] Bureau of Labor Statistics. 1997. ***Economy at a Glance.*** http://stats.bls.gov:80/eag.table.html.

[3] Bureau of Labor Statistics. 1997. ***Employment Situation Summary.*** http://stats.bls.gov/newsrels.htm.

[4] Maney, Kevin. 1997. "Lawyers Circling Over 2000 Time Bomb," *USA Today*. 1 December, p. B1.

[5] National Center for Education Statistics. 1997. ***Projections of Education Statistics to 2007***. 26th Edition. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement (NCES 97-382).

[6] U.S. Bureau of the Census. 1996. ***Statistical Abstract of the United States: 1996.*** (116th edition.) Washington, DC.

[7] National Center for Education Statistics. 1996. ***Digest of Education Statistics 1996.*** Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement (NCES 96-133).

[8] Scheetz, L. Patrick. 1996. ***Recruiting Trends- 1996-97***. East Lansing, MI.: Collegiate Employment Research Institute, Michigan State University, p. 7-8.

Employers Responding to

RECRUITING TRENDS 1995-96

- A -

A P Green Industries Inc., Mexico, MO
Aai Corp., Hunt Valley, MD
ABF Freight System, Inc., Fort Smith, AR
Acacia Group, The, Bethesda, MD
Acme Electric Corp., Cuba, NY
Adaptec Inc., Milpitas, CA
AG Communications Systems, Phoenix, AZ
Ail Systems Inc., Deer Park, NY
Air Liquide America Corp., Houston, TX
Airtouch Cellular, Bellevue, WA
Airwaves, Lewis Center, OH
AK Steel Corp., Middletown, OH
Alcatel Network Systems, Richardson, TX
Allen Bradley Co., Shawnee, OK
Allied Bendix Aero, Columbia, MD
Allied Interstate Inc., Minneapolis, MN
Allied Signal Inc., Morristown, NJ
Allied Signal Truck Brake Systems Co., Elyria, OH
Allstate Insurance, Irving, TX
Allstate Insurance, Buffalo, IL
Alma Products, Alma, MI
Amdahl Corp., Sunnyvale, CA
American Cyanamid-Ag Products, Parsippany, NJ
American Drug Stores, Oak Brook, IL
American Electric Power Co., Columbus, OH
American Express Financial Advisors, Minneapolis, MN
American General Financial, Evansville, IN
American Institute Of Business, Des Moines, IA
American International Group, New York, NY
American Management Systems Inc., Fairfax, VA
American National Bank, Chicago, IL
Amethyst Corp., Chicago, IL
Amoco Corp., Chicago, IL
Amsted Industries, Chicago, IL
Andersen Worldwide, Chicago, IL
Applicon Inc., Ann Arbor, MI
Applied Materials Inc., Santa Clara, CA
Aramark Corp., Philadelphia, PA
Aramark Uniform Services, Burbank, CA
Archer Daniels Midland Co., Decatur, IL
Arete Associates, Sherman Oaks, CA
Argonne National Lab, Argonne, IL
Arinc Inc., Annapolis, MD
Arkwright Mutual Insurance, Waltham, MA
Armco Inc. Mansfield Operations, Mansfield, OH
Armco Research & Technology, Middletown, OH
Arthur Andersen LLP, Oklahoma City, OK
Ashland Inc., Ashland, KY
Austin Company, Kansas City, MO
Auto Club Of Michigan, Dearborn, MI

- B -

B D O Seidman, San Francisco, CA
Ball Horticultural Co., West Chicago, IL
Baltimore Police, Baltimore, MD
Bank of Montreal/Harris Bank, Chicago, IL
Bank One, Columbus NA, Columbus, OH
BASF Corp.-Fibers Division, Anderson, SC
BASF Corporation, Mt. Olive, NJ
Baxter Healthcare Corp., Deerfield, IL
Bayer Corporation, Pittsburgh, PA
BC & Associates, Fullerton, CA
BDM International, Inc., Mclean, VA
Bed, Bath & Beyond, Schaumburg, IL
Bell Atlantic, New York, NY
Bell Helicopter Textron Inc., Fort Worth, TX
Bellwith International Ltd., Grandville, MI
Benson & Neff, San Francisco, CA
Bernard Hodes Advertising, Englewood, CO
Billo Red Foods, Mauldin, SC
Bloom Engineering Co., Pittsburgh, PA
Blue Cross Blue Shield, Birmingham, AL
Blue Cross-Florida, Jacksonville, FL
Bob's Stores, Meriden, CT

BOC Lansing Auto, Lansing, MI
Boeing Co., Seattle, WA
Bon-Ton Stores Inc., York, PA
Bonneville Power Administration, Portland, OR
Boy Scouts Of America, Irving, TX
Brecker & Merryman Inc., New York, NY
Brickley Delong & Ru, Muskegon, MI
Brightmoor Comm. Center, Detroit, MI
Broad Corporation, River Rouge, MI
Brotsky & Silecchia, Inc, Birmingham, MI
Brown & Caldwell, Walnut Creek, CA
Brown & Sharpe Mfg Co., North Kingstown, RI
Budd Co., Kendallville, IN
Bureau of Alcohol Tobacco & Firearms, Chicago, IL

- C -

C U Processing, Southfield, MI
C-Mac of America, Inc., West Palm Beach, FL
C.H. Robinson Co./Sales Search, Eden Prairie, MN
Caliber Logistics, Hudson, OH
California Bureau Of Personnel, Sacramento, CA
Camp Dresser & McGee Inc., Cambridge, MA
Campbell Soup Co., Napoleon, OH
Carpenter Technology, Reading, PA
Caterpillar Inc., Peoria, IL
Charles Schwab & Co., San Francisco, CA
Chevron Corp., San Francisco, CA
Chicago Association For Retarded, Chicago, IL
Chicago Board Of Trade, Chicago, IL
Chrysler Corporation, Auburn Hills, MI
Cigna, Hartford, CN
CIGNA, Philadelphia, PA
Cincinnati Electric Corp., Mason, OH
Cinergy Corporation, Plainfield, IN
Citibank, New York, NY
Citizens Bank, Flint, MI
Cleveland-Cliffs Inc., Cleveland, OH
Clorox Company, Oakland, CA
CNA Insurance, Chicago, IL
Collins & Aikman Corp., Charlotte, NC
Colonial Pipeline Co., Atlanta, GA
Comed, Chicago, IL
Comerica Inc., Detroit, MI
Commerce Federal Savings, Omaha, NE
Commercial Equipment Co., Grand Rapids, MI
Compaq Computer Corp., Houston, TX
Complete Business Solutions Inc., Farmington Hills, MI
Comptroller-Cook County, Chicago, IL
Compuserve Inc., Hilliard, OH
Comshare Inc., Ann Arbor, MI
Concept Five Technologies, MaClain, VA
Concession Air/Sport, Buffalo, NY
Conoco Inc., Houston, TX
Consol Inc., Pittsburgh, PA
Consolidated Edison, New York, NY
Consolidated Freightways Inc., Portland, OR
Consolidated Stores, Columbus, OH
Consumers Power Co., Jackson, MI
Control Data Systems, Arden Hills, MN
Cooper Industries, Houston, TX
Corn Products Co., Summit Argo, IL
Corning Inc., Corning, NY
Coro Midwestern Center, St. Louis, MO
Country Companies Ins. Group, Bloomington, IL
Creative Solutions, Dexter, MI
Crosswinds Communities, Novi, MI
Crowe Chizek, Grand Rapids, MI
Crown Cork & Seal Co., Philadelphia, PA
CSX Transportation, Jacksonville, FL

- D -

Dalton Corp., Kendallville, IN
Dana Universal Joint, Toledo, OH
Deere & Co., Moline, IL
Dekalb Swine Breeder, Plains, KS
Delfield Company, Mt. Pleasant, MI
Delphi Automotive Systems, Troy, MI
Dentsply International, York, PA
Dept. Of State, Arlington, VA
Detroit Area Council, Detroit, MI
Detroit Diesel Corporation, Detroit, MI
Dewberry & Davis, Fairfax, VA
Diebold Inc., North Canton, OH
Dietrich Industries Inc., Pittsburgh, PA
Disclosure Inc., Bethesda, MD

DMB & B D'Arcy, Masius Benton & Bowles, Troy, MI
DNP America Inc., New York, NY
Donaldson Co. Inc., Minneapolis, MN
Donnelly Corp., Holland, MI
Donrey Media Group, Fort Smith, AR
Dow Chemical USA, Midland, MI
Dowelanco, Indianapolis, IN
DSC Communications, Plano, TX
Dugan & Meyers Const., Cincinnati, OH
Dupont, Wilmington, DE
Duracell Inc., Bethel, CT
Dynetics Inc., Huntsville, AL

- E -

Eastman Chemical Co., Kingsport, TN
Eaton Corp., Cleveland, OH
Eli Lilly And Co., Indianapolis, IN
Elliot Company, Jeannette, PA
Elsag Bailey Process Automation, Wickliffe, OH
Elwood City Forge, Elwood City, PA
Emerson Power Transmission, Ithaca, NY
Empire Dist Electric Co., Joplin, MO
Ensco Inc., Springfield, VA
Envirex Inc., Waukesha, WI
Exxon Co. USA, Houston, TX

- F-

Factory Mutual Engineering, Norwood, MA
Famous Footwear, Madison, WI
Federal Mogul Corp., Detroit, MI
Ferguson Enterprises Inc., Newport News, VA
Fieldcrest Cannon, Eden, NC
Fina Inc., Dallas, TX
Financial Institutions Bureau of Michigan Dept. Of Consumer and Industry Services, Lansing, MI
Firestone Ind. Prods., Noblesville, IN
First Data Investor Service Group, Westborough, MA
First Union Natl. Bank Of Florida, Charlotte, NC
FMC-Northern Div., Minneapolis, MN
Follmer Rudzewicz & Company, Sterling Heights, MI
Footaction USA, Irving, TX
Ford Motor Credit Co., Dearborn, MI
Formation Inc., Mooreston, NJ
Forsyth Memorial Hospital, Winston Salem, NC
Fox Chase Cancer Center, Philadelphia, PA
Freightliner Corp., Portland, OR
Friedman Group Inc., St. Paul, MN

- G -

Gannett Co. Inc., Arlington, VA
Gap Inc., San Bruno, CA
Garden City Coop Inc., Garden City, KS
Garmin, Olathe, KS
Gatx Capital Corp., San Francisco, CA
Gec Marconi Electronic Sys Corp., Wayne, NJ
Gen Railway Signal Corp., Rochester, NY
Genco, Johnstown, PA
General Chemical Corp., Parsippany, NJ
General Electric Co., Fairfield, CT
General Mills Inc., Minneapolis, MN
Geraghty & Miller Inc., Denver, CO
Giddings & Lewis Elc., Fond Du Lac, WI
Glidden Company, Cleveland, OH
Golden West Finance Corp, Oakland, CA
Goldner-Walsh, Farmington Hills, MI
GPU Nuclear Corp., Middletown, PA
Graham Archit Co., York, PA
Grain Processing Corp., Muscatine, IA
Graphic Arts Mutual, New Hartford, NY
Great West Life & Annuity Ins. Co., Englewood, CO
Greater Chicago Group, Northbrook, IL
Greenhorne & Omara, Inc., Greenbelt, MD
GTE Supply, Irving, TX

- H -

H.A. Phillips & Assoc., Inc., Washington, NC
Harbison-Walker Refractories, Pittsburgh, PA
Harding Associates Inc., Novato, CA
Harris Corp., Melbourne, FL
Harris Trust Bank, Chicago, IL
Harza Engineering Co., Chicago, IL
Havi Corp., Westmont, IL
Hayes Albion Corp., Albion, MI
Hazen & Sawyer P. C., New York, NY
HDR Inc., Omaha, NE
Heartspring, Wichita, KS
Hechinger Store Co., Largo, MD
Hertz Equipment Rental, Troy, MI
Hill's Pet Nutrition Inc., Richmond, IN

Hitachi, Edmore, MI
HNTB Corporation, Kansas City, MO
Hoechst Celanese Corp. SE Region, Spartanburg, SC
Honeywell Inc., Minneapolis, MN
Hormel Foods Corp., Austin, MN
Hosp Dietary Service, Farmington Hill, MI
Houston's Restaurants Inc., Atlanta, GA
Howmet Corp., Whitehall, MI
HRB Systems Inc., State College, PA
HRU Inc.-Technical Resources, Lansing, MI
Huntington Bancshare, Columbus, OH
Hyde Athletic Indust., Peabody, MA
Hyundai Electronics, San Jose, CA,

- I -

IBM Corp, Chicago, IL
Ilcc (Us), Boston, MA
Illinois Dept. of Transportation, Springfield, IL
Illinois Environmental Protection, Springfield, IL
Indiana Dept. Natural Resources, Indianapolis, IN
Inductoheart, Madison Hts, MI
Ingalls Shipbuilding Inc., Pascagoula, MS
Ingersoll-Rand Co., Madison Heights, MI
Ingram Micro, Santa Ana, CA
Inso Corporation, Chicago, IL
Integrated Device Technology Inc., San Jose, CA
International Data Group, Framingham, MA
Iowa State Div. Adult Corr., Des Moines, IA
Iva Manufacturing, Iva, SC

- J -

J.D. Edwards & Co., Denver, CO
J.H. Heafner Co. Inc., Lincolnton, NC
J.M. Smuckers Co., Orrville, OH
Jabil Circuit Inc., St. Petersburg, FL
Jacobsons, Jackson, MI
Jockey Intl Inc., Kenosha, WI
John Henry Company, Lansing, MI
Johnson & Johnson, New Brunswick, NJ
Johnson Mathey Inc., Wayne, PA

- K -

Kansas Dept. Of Transportation, Topeka, KS
Keane Inc., Boston, MA
Kellogg Co., Battle Creek, MI
Kentucky Utilities, Lexington, KY
Kiewit Construction Group Inc., Omaha, NE
Kimberly-Clark Corp., Neenah, WI
Kirby World Headquarters, Cleveland, OH
KLA Instruments Corp., San Jose, CA
Koch Industries, Wichita, KS
Kolon, Bittker & Desmond, Inc., Troy, MI
Koppen & Associates, St. Louis, MO
Kraft Foods, Northfield, IL
Kroger Co., Cincinnati, OH
Kroger Co., Indianapolis, IN

- L -

La Quinta Inns Inc., San Antonio, TX
La-Z-Boy Incorporated, Monroe, MI
Lab Safety Supply, Janesville, WI
Laclede Gas Co., St Louis, MO
Lamb-Weston, Tri City, WA
Lambda Electronics, Melville, NY
Lawrence Livermore National Lab, Livermore, CA
Leo Burnett Co. USA Inc., Chicago, IL
Libbey-Owens-Ford Co., Toledo, OH
Liberty Mutual Ins. Group, Boston, MA
Lionel Trains Inc., Chesterfield, MI
Litton Systems Inc. D, Agoura Hills, CA
LNR Comm. Corp., Hauppauge, NY
Lockheed Martin Astronautics, Littleton, CO
Lockheed Martin Corp., Bethesda, MD
Lockheed Martin Idaho Tech. Co., Idaho Falls, ID
Lockheed Martin Missiles & Space, Sunnyvale, CA
Lockheed Martin Skunk Works, Palmdale, CA
Lockheed Martin Tactical Aircraft, Fort Worth, TX
Long Island Lighting, Hicksville, NY
Louis Dreyfus Corp., Wilton, CT
LTV Steel Co., East Chicago, IN
Lubrizol Corp., Wickliffe, OH
Lutron Electronics, Coopersburg, PA

- M -

M.W.Kellogg Co., Houston, TX
Mack Trucks Inc., Allentown, PA
Marathon Oil Co., Findlay, OH
Marquip Inc., Madison, WI
Masland Carpets, Carlisle, PA
May Dept Stores Co., St Louis, MO
Maytag Appliances, Newton, IA
McDermott Intnl., New Orleans, LA
Medex Inc: A Foron Company, Hilliard, OH
Medical Mutual Of Ohio, Cleveland, OH
Medtronic Inc., Minneapolis, MN
Meijer Inc., Grand Rapids, MI
Meldisco, Mahwah, NJ
Menasha Corp., Neenah, WI
Mercantile Bank of St. Louis, St Louis, MO
Merskin & Merskin PC, Ludington, MI
Mervyn's California, Hayward, CA
Met. San Dist. Greater Chicago, Chicago, IL
Metatec Corp., Dublin, OH
Metcalf & Eddy, Wakefield, MA
Metsource Consulting, Southfield, MI
Michigan Civil Service, Lansing, MI
MIKA Systems, Inc., Bingham Farms, MI
Millhouse & Holaly, Flint, MI
Millipore Corp., Bedford, MA
Minnesota Dept. of Transportation, St. Paul, MN
Minute Maid Co., Houston, TX
Minute Maid Company, Houston, TX
Missouri Hwy. & Transportation, Jefferson City, MO
Monfort Of Colorado, Greeley, CO
Montell Polyolefins, Wilmington, DE
Moore Products Co., Spring House, PA
Mutual of New York, Houston, TX
Mutual Of Omaha Co., Omaha, NE

- N -

Nabisco Inc., East Hanover, NJ
NASA, John F Kennedy Space Center, Kennedy Space Center, FL
NASA-JOHNSON Space Center, Houston, TX
NASA-MARSHALL Space Flight Center, Marshall Sp. Flight Ctr., AL
National Credit Union Admin., Alexander, VA
National Instruments, Austin, TX
National Starch & Chemical Co., Bridgewater, NJ
Naval Surface Warfare Center, Dahlgren, VA
Navistar Intl. Transportation Corp., Chicago, IL
NBD Bancorp, Detroit, MI
Network Systems, Minneapolis, MN
New England Power Service Co., Westborough, MA
New Holland North America Inc., New Holland, PA
New York Life Insurance, New York, NY
Next Level Systems, Inc., Hatboro, PA
Nicor Gas Co., Aurora, IL
NIPSCO Industries Inc., Hammond, IN
Noland Company, Newport News, VA
Nortel (Northern Telecom), Richardson, TX
Northern States Power Co., Minneapolis, MN
Northrop Corp., Rolling Meadows, IL
Northrop Grumman Corp., Pico Rivera, CA
Northwestern Mutual Life Ins. Co., Milwaukee, WI
Northwestern Mutual Life/Baird Securities, Auburn Hills, MI

- O -

Occidental Chemical, Dallas, TX
Occidental Chemical, Warren, MI
Omni Hotels, Irving, TX
Oshkosh Truck Corp., Oshkosh, WI
Owens-Corning, Toledo, OH
Owens-Illinois Inc., Toledo, OH

- P -

PA Dept. Of Transportation, Harrisburg, PA
Pacific Basin Foods, Elk Grove Vill, IL
Pacific Life Insurance, Newport Beach, CA
Parian Development Group Inc., Chicago, IL
Parker Hannifin Corp., Cleveland, OH
Parker Hannifin-Abex Nwl Division, Kalamazoo, MI
Parker Wittus, Southfield, MI
Parsons Brinckerhoff, New York, NY
Payless Shoesource, Topeka, KS
Peace Corps, Washington, DC
Pennsylvania Civil Service Comm., Harrisburg, PA

Pennsylvania Environmental Pro. Dept., Harrisburg, PA
Penske Logistics, Reading, PA
Peoples Gas, Chicago, IL
Persimmon It, Inc., Durham, NC
Pharmacla & Upjohn Co., Kalamazoo, MI
Phillips Petroleum, Bartlesville, OK
Photocircuits Corp., Glen Cove, NY
Piedmont Publishing, Winston-Salem, NC
Pillsbury, Minneapolis, MN
Pirelli Armstrong Tire Corp., New Haven, CT
Pitney Bowes Inc., Stamford, CT
Plante & Moran, Southfield, MI
Plastipak Packaging, Inc., Plymouth, MI
PNC Bank Corp., Cincinatti, OH
Polaroid Corp., Cambridge, MA
Power Packaging, St Charles, IL
Principal Financial Group, Des Moines, IA
Procter & Gamble, Cincinnati, OH
Professional Rehabilitation Svcs., Madison, WI
Proffitt's Inc., Jackson, MS
Protégé Systems Inc., Schaumburg, IL

- Q -

Quaker Oats, Chicago, IL
QVC Inc., West Chester, PA

- R -

Rand Corp., Santa Monica, CA
Raytheon Company, Lexington, MA
Raytheon E-Systems, Inc., Dallas, TX
Reader's Digest Association Inc., Pleasantville, NY
Realogic Inc., Cleveland, OH
Reed Tool Co., Houston, TX
Regional Med Labs Inc., Battle Creek, MI
Republic Engineered Steels Inc., Canton, OH
River City Food Co., Grand Rapids, MI
Robert Bosch Corp., Charleston, SC
Rohm & Haas Co., Philadelphia, PA
RTL Advertising and Consulting, Southfield, MI
Russell Business Forms, Lansing, MI

- S -

S 3 Inc., Santa Clara, CA
SAIC-Frederick, Frederick, MD
Samsonite Corp., Denver, CO
San Antonio Public Service, San Antonio, TX
Sanders-Lockheed Martin Co., Nashua, NH
Sandia National Laboratories, Albuquerque, NM
Santa Fe Energy Resources Inc., Houston, TX
Santee Cooper, Moncks Corner, SC
SAP America Inc., Waltham, MA
Science Applications Intl. Corp., San Diego, CA
SCO, Santa Cruz, CA
Service Merchandise Co. Inc., Brentwood, TN
Shaw Industries Inc., Dalton, GA
Sherwin Williams Co., Tucker, GA
Shoe Carnival Inc., Evansville, IN
Siemers Medical Systems Inc., Iselin, NJ
Signet Bank Corp., Richmond, VA
SMART Professional Services, El Paso, TX
Social Security Administration, Chicago, IL
Social Security Administration, Melrose Park, IL
Solectron Corp., Milpitas, CA
Sonat Exploration Co., Houston, TX
Source One Mortgage Services Corp., Farmington Hills, MI
South Carolina State Govt. System, Columbia, SC
Southern States Cooperative Inc., Richmond, VA
Southwestern Public Service Co., Amarillo, TX
Southwire Co., Carrollton, GA
Spang & Company, Butler, PA
Sprint North Central Operations, Carlisle, PA
SSI Technologies Inc., Janesville, WI
St Mary's Hospital, Decatur, IL
Stage Stores Inc., Houston, TX
Star Market Co., Cambridge, MA
State Career Center, Columbia, SC
State Farm Insurance Co., Bloomington, IL
State St. Bank & Trust, Quincy, MA
Stern's Department Stores, Paramus, NJ
Stone, August, Baker & Company, Troy, MI
Stryker Medical Instruments, Kalamazoo, MI
Subsurface Exploration, Pasadena, CA
Sun Bank/Miami, Miami, FL
Sun Microsystems Inc., Palo Alto, CA

Susquehanna Investment Group, Bala Cynwyd, PA
Sverdup Facilities Inc., St. Louis, MO
Synchronous Media, Lansing, MI
Systems & Computer Tech.Corp., Malvern, PA

- T -

TASC (The Analytic Sciences Corp), Reading, MA
Tektronix Inc., Beaverton, OR
Tellabs Operations, Inc., Bolingbrook, IL
Teradyne Inc., Boston, MA
Texas Gas Transmission Corp., Owensboro, KY
Thomson Consumer Electric, Marion, IN
Towers Perrin, Valhalla, NY
Toys-R-Us, Paramus, NJ
Tremco Inc., Beachwood, OH
Troy Design, Troy, MI
TRW Space & Electronics Group, Redondo Beach, CA
TU Services, Dallas, TX
Twitchell Corp., Dothan, AL

- U -

U S Oil Co Inc, Combined Lcks, WI
U.S. Bancorp, Minneapolis, MN
U.S. Department Of State, Arlington, VA
U.S. Dept. of Veterans Affairs, Detroit, MI
Underwriters Lab Inc., Northbrook, IL
Union Camp Corp., Norcross, GA
Union Camp Corp., Shelbyville, KY
Union Electric Co., St Louis, MO
United Defense, York, PA
United Health Care, Hartford, CT
United Illuminations Co., New Haven, CT
Universal Electric, Owosso, MI
Universal Forest Products, Grand Rapids, MI
UNUM Corporation, Portland, ME
UOP, Des Plaines, IL
US Department Of Labor, Washington, DC
US General Accounting Office, Washington, DC
US Immigration & Naturalization Services, S Burlington, VT
US Naval Surface, Dahlgren, VA
US Steel Group, Pittsburgh, PA
US Web, Southfield, MI
USS-POSCO Industries, Pittsburg, CA

- V -

Valleyfair, Shakopee, MN
Veterans Medical Center, N Little Rock, AR
Victualic Co. of America, Kalamazoo, MI
Virginia Electric Power, Richmond, VA
Virtual Resources Corp., Whitmors Lake, MI
Vitalcom, Tustin, CA

- W -

Wachovia Corporation, Atlanta, GA
Walt Disney World, Burbank, FL
Walton Lumber Co., Flint, MI
Watson Wyatt Worldwide, Bethesda, MD
WBOC-TV, Salisbury, MD
Westin Hotel, Detroit, MI
Willis Associates, Lyndhurst, OH
Winn Enterprises, Bryan, TX
Wisconsin Cooperative Extension, Madison, WI
Wisconsin Gas Co., Milwaukee, WI
Wolf Creek Nuclear Operating Corp.., Burlington, KS
World Bank, The, Washington, DC

- Y -

York International Corp., York, PA
Young & Rubicam Detroit, MI

- Z -

Zee Medical, Inc., Irvine, CA
Zeneca Inc., Wilmington, DE

MICHIGAN STATE UNIVERSITY
Career Services and Placement
113 Student Services Building
East Lansing, Michigan 48824-1113

Recruiting Trends 1997-98

ORDER FORM

I want to order _____ (#) copies of Recruiting Trends 1997-98. 1-4 copies at $25 each; 5-9 copies at $20 each; 10-19 copies at $15 each; 20 or more copies at $12.50 each. Copies of Recruiting Trends ordered by educational institutions are $12.50 each.

Name: _____

Title: _____

Organization: _____

Street: _____

City: _____ State: _____ Zip Code: _____

Telephone ( ) _____

Total Charge for this order _____

Pre-payment is required. Please make checks payable to ***MICHIGAN STATE UNIVERSITY.***

Delivery method: U.S. Mail

Federal Express (Federal Express number is required for charges)

For any questions about this publication or if you need further information, please give us a call at (517) 355-9510, extension 361; FAX (517) 353-2597; or email: pla00@msu.edu.